John, phone

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SEARCH REQUEST FORM

1-748

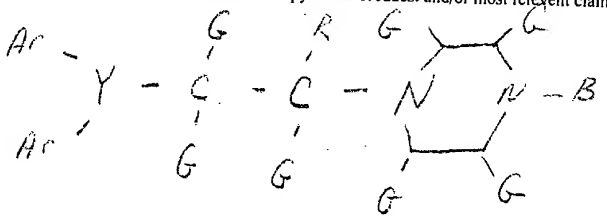
Requestor's Name: E Bernhardt

Serial Number: 09/127057

Date: 1/26/99 Phone: 308-4719 Art Unit: 4E15.

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).



R = H, C_1-C_{10} unsubstd. alkyl

G = H, Me.

Y = $-N-$, $-C(G)-$, $-C(OH)-$, $-C(CN)-$, $-C(C{=}O)-N*$

Ar, B = any aryl, heteroaryl ring (opt. substd.)

monocyclic or fused

BEST AVAILABLE COPY

STAFF USE ONLY

Date completed: 1-29-99

Searcher: JOHN DANTZMAN

Terminal time:

Elapsed time:

CPU time:

Total time:

Number of Searches:

Number of Databases:

Search Site

- ____ STIC
- ____ CM-1
- ____ Pre-S

Type of Search

- ____ N.A. Sequence
- ____ A.A. Sequence
- ____ Structure
- ____ Bibliographic

Vendors

- ____ IG
- ____ STN
- ____ Dialog
- ____ APS
- ____ Geninfo
- ____ SDC
- ____ DARC/Questel
- ____ Other

=> d his -l14

SUMMARY

(FILE 'REGISTRY' ENTERED AT 13:35:10 ON 29 JAN 1999)
DEL HIS Y
L1 STR
L2 0 S L1
L3 SCR 1841 AND 1993
L4 2 S L1 AND L3
L5 269 S L1 AND L3 FUL

FILE 'CAPLUS' ENTERED AT 13:38:31 ON 29 JAN 1999
L6 38 S L5

FILE 'REGISTRY' ENTERED AT 13:38:40 ON 29 JAN 1999
L7 STR L1
L8 0 S L7 SSS SAM SUB=L5
L9 5 S L7 SSS FUL SUB=L5
L10 STR L1
L11 12 S L10 SSS SAM SUB=L5
L12 247 S L10 SSS FUL SUB=L5 ← 247 compounds Registry

(I had iteration incomplete)

FILE 'CAPLUS' ENTERED AT 13:42:13 ON 29 JAN 1999
L13 32 S L12 ← 32 cites Caplus

FILE 'CAOLD' ENTERED AT 13:48:33 ON 29 JAN 1999
L14 4 S L12 ← 4 cites Caold

FILE 'BEILSTEIN' ENTERED AT 13:49:14 ON 29 JAN 1999

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=> d que l13

L1                STR
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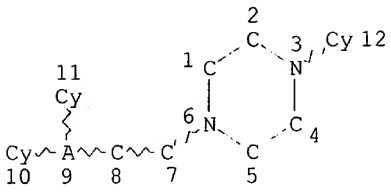

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GGCAT   IS UNS  AT  11
GGCAT   IS UNS  AT  12
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  12

STEREO ATTRIBUTES: NONE
L3                SCR 1841 AND 1993
L5            269 SEA FILE=REGISTRY SSS FUL L1 AND L3
L10               STR
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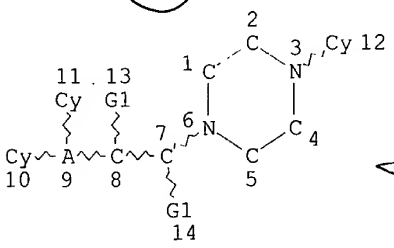

Subset Search
To Narrow

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VAR G1=H/C
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NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L12           247 SEA FILE=REGISTRY SUB=L5 SSS FUL L10
L13            32 SEA FILE=CAPLUS ABB=ON  PLU=ON  L12
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247 compounds
32 cites.

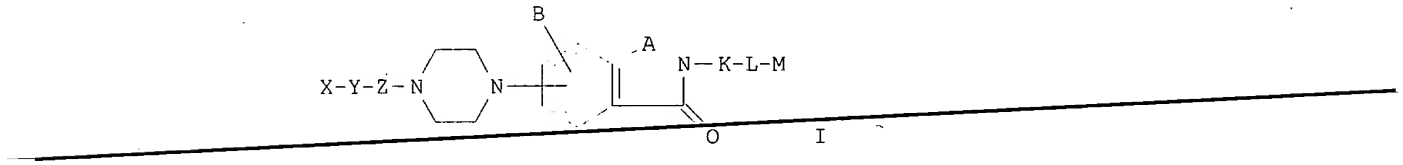
=> d bib abs hitstr

L13 ANSWER 1 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1998:793126 CAPLUS
DN 130:52434
TI Prepn. of nitrogenous heterocyclic compounds as hyperlipemia remedies
IN Ohkura, Naoto; Tsuruoka, Takashi; Usui, Takayuki; Hiraiwa, Yukiko; Matsushima, Tetsuya; Shiotani, Masaharu; Niizato, Tetsutaro; Nakatani, Yuuko; Suzuki, Shigeki; Kuroda, Chidsuko; Katano, Kiyoaki
PA Meiji Seika Kaisha, Ltd., Japan; et al.
SO PCT Int. Appl., 194 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9854135	A1	19981203	WO 98-JP2411	19980601

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRAI JP 97-141410 19970530
GI



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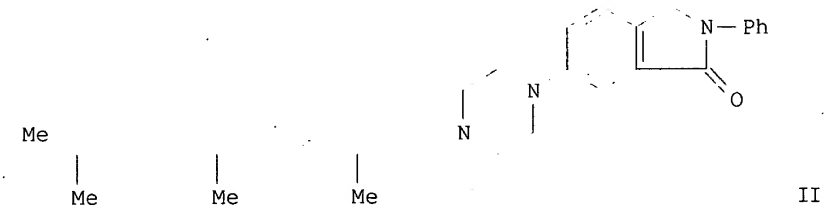

II

AB The title compds. [I; A = CR1R2(CH2)i; (wherein R1 and R2 each represents hydrogen or alkyl, i = 0-1), CH:CH, OCH2, or S(O)jCH2 (wherein j = 0-2); B = hydrogen or halogen; X = CR3R4R5, NR6R7, (CH2CH:C(CH3)CH2)pCH2CH:C(CH3)2, alkyl, cycloalkyl, Ph, cinnamyl, or heteroaryl; Y = (CH2)q, CH:CH, NR8,

oxygen, or a bond; Z = carbonyl or a bond; K = alkylene or a bond; L = CH:CH or a bond; and M = hydrogen, alkyl, cycloalkyl, Ph, heterocycle, biphenyl, or diphenymethyl; p = 0-2; q = 1-6; R3-R5 = hydrogen, phenyl; R6-R7 = hydrogen, Ph, benzyl; R8 = hydrogen, C1-6 alkyl] are prepd. I inhibit the biosynthesis of triglycerides in the liver and also inhibit the secretion of lipoproteins contg. apolipoprotein B from the liver. I are hence useful for the prevention/treatment of hyperlipemia (esp. hyper-VLDL-emia) and diseases caused thereby, such as arteriosclerotic diseases, e.g., myocardial infarct, and pancreatitis. Thus, title compd. (II) was prepd. by multi-step reactions and showed 56% and 90% inhibitory activity for apolipoprotein B and triglycerides. A formulation contg. I was also presented.

IT **217491-47-9P 217491-64-0P 217491-66-2P**
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217491-87-7P 217491-88-8P 217491-92-4P
217491-93-5P 217491-95-7P 217491-97-9P
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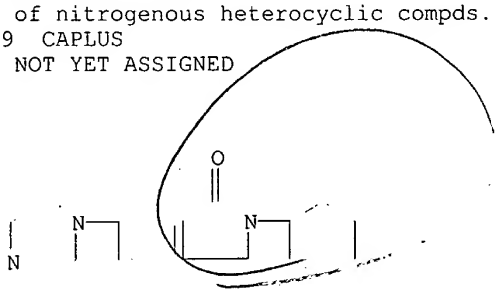
217492-96-1P 217492-97-2P 217492-98-3P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of nitrogenous heterocyclic compds. as hyperlipemia remedies)

RN 217491-47-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



$Ph_2CH-CH_2-CH_2$

RN 217491-64-0 CAPLUS
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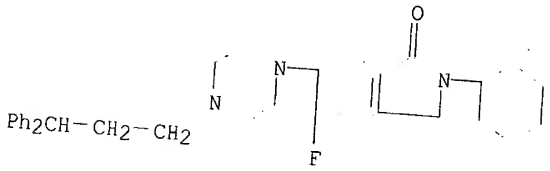

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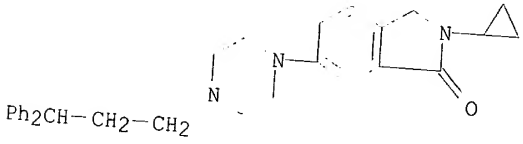

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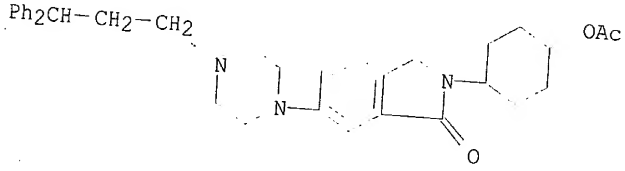

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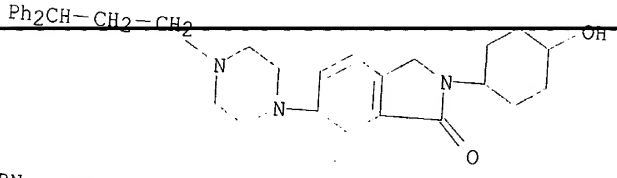

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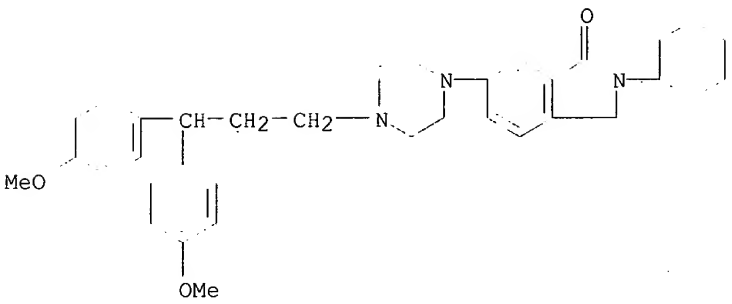

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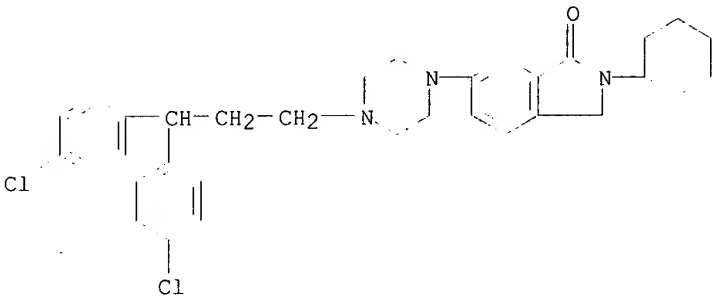

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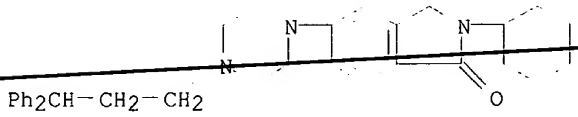

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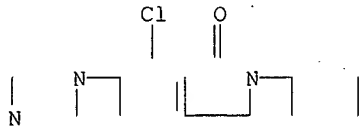

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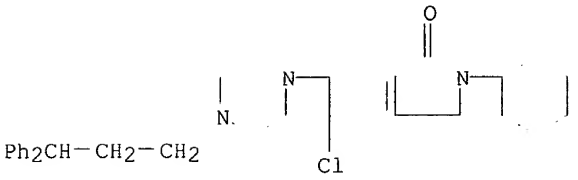

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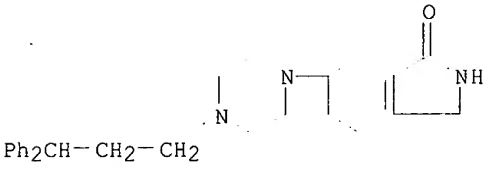

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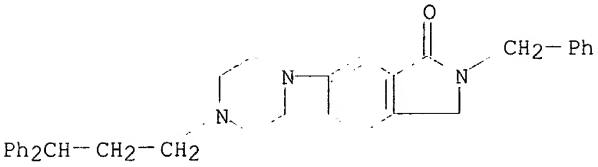

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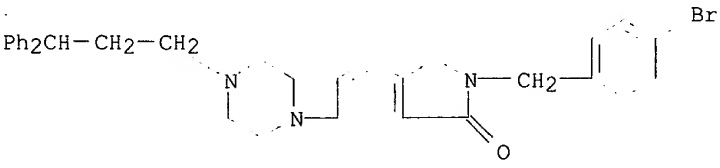

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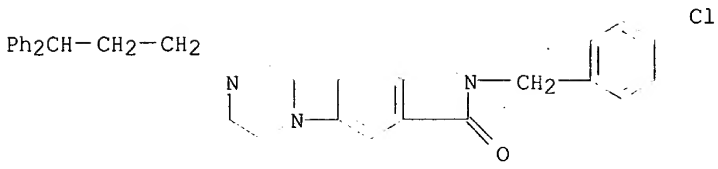

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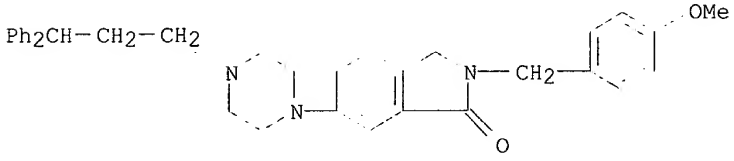

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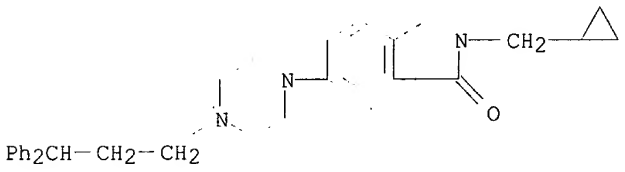

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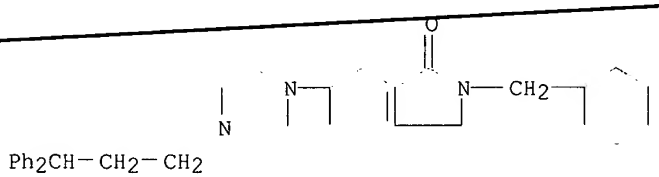

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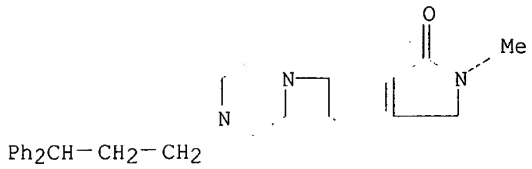

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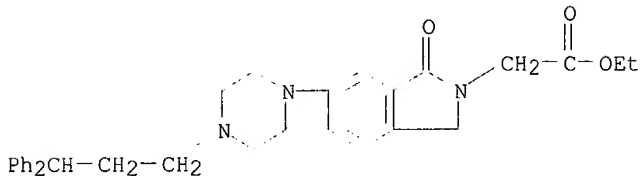

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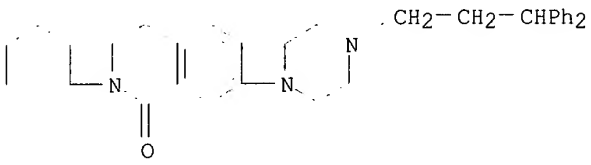

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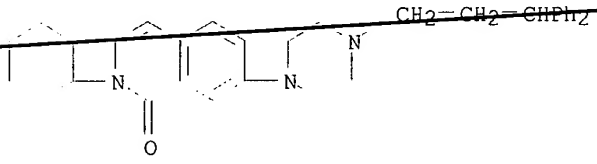

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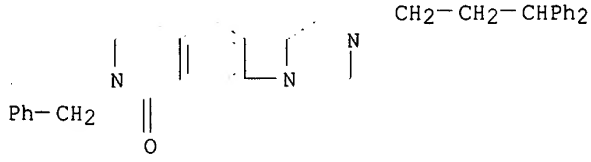

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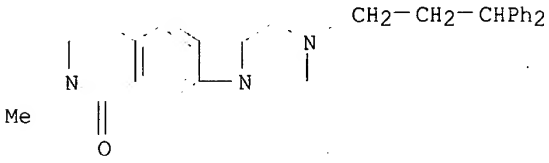

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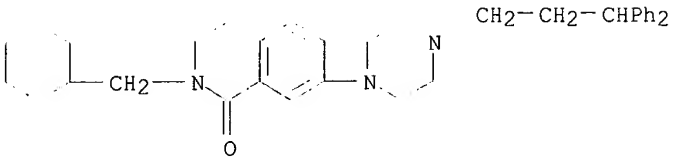

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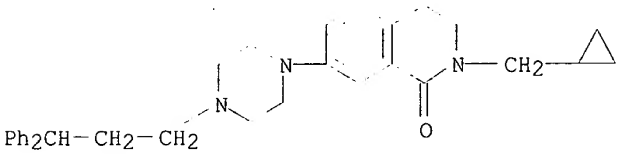

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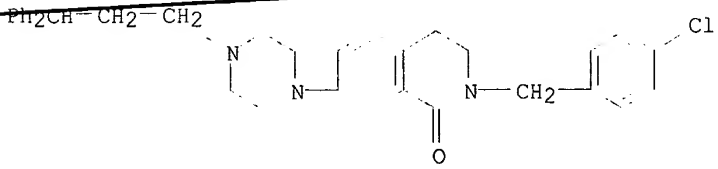

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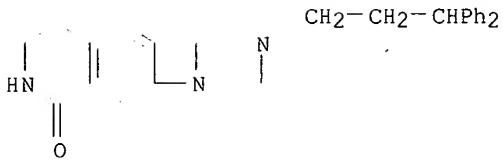

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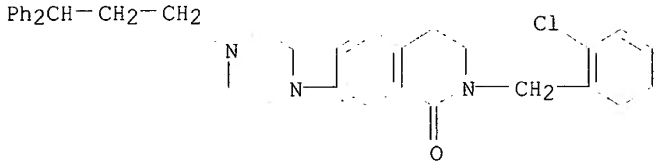

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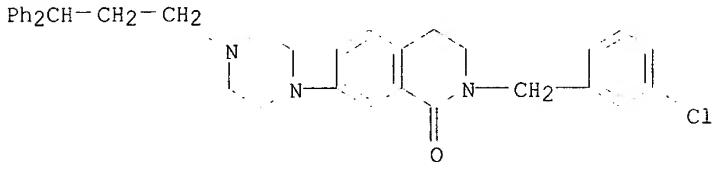

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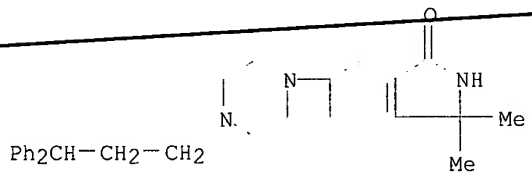

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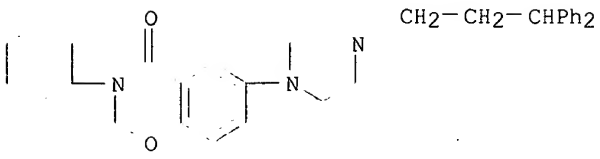
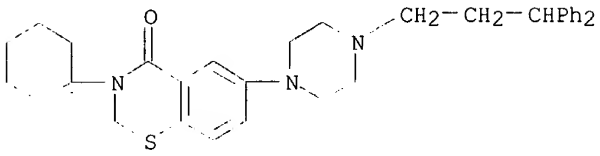
RN 217492-34-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



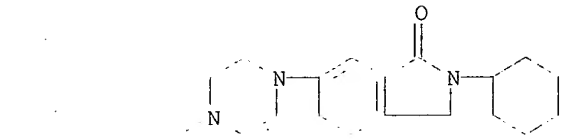
● 2 HCl

RN 217492-35-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

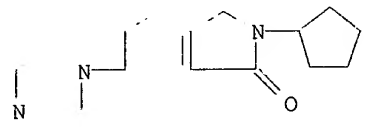


● 2 HCl

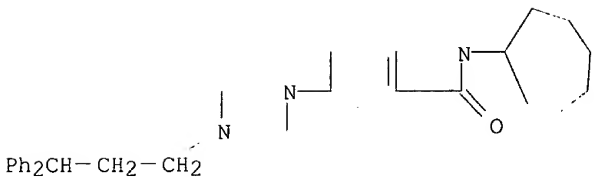
RN 217492-36-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-42-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

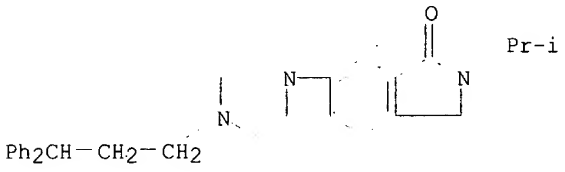


RN 217492-43-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



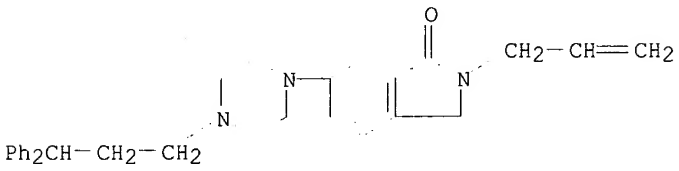
$Ph_2CH-CH_2-CH_2$

RN 217492-44-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



$Ph_2CH-CH_2-CH_2$

RN 217492-45-0 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



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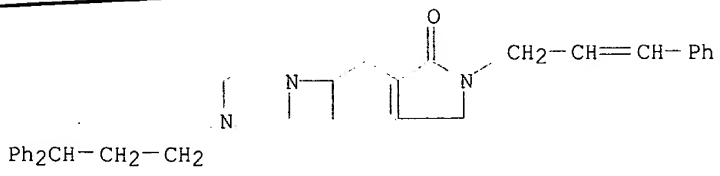
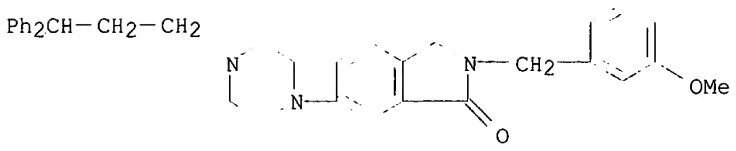
RN 217492-46-1 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

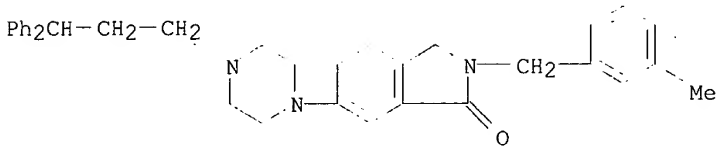


$Ph_2CH-CH_2-CH_2$

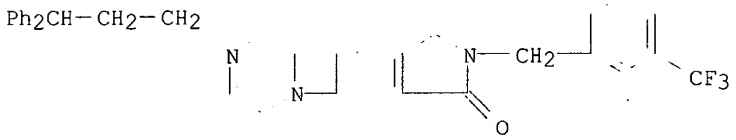
RN 217492-47-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



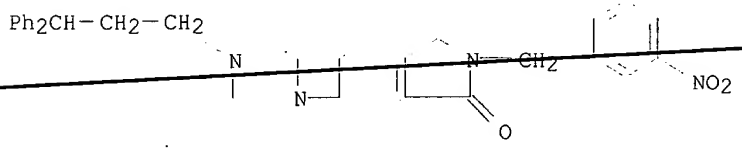
RN 217492-48-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



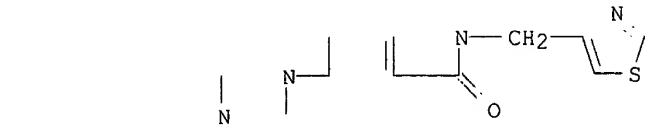
RN 217492-49-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-50-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

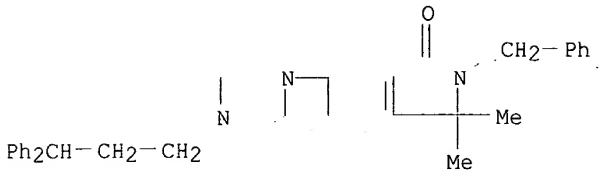


RN 217492-51-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

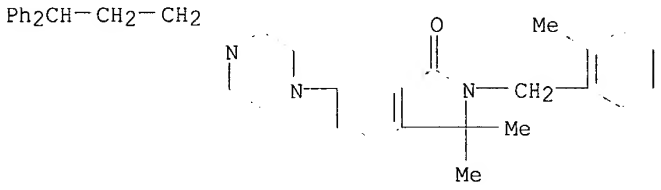


RN 217492-52-9 CAPLUS

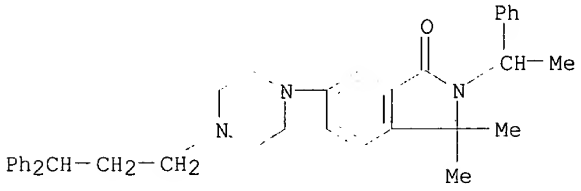
CN INDEX NAME NOT YET ASSIGNED



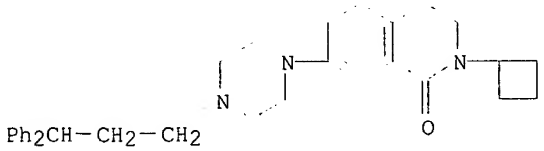
RN 217492-53-0 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



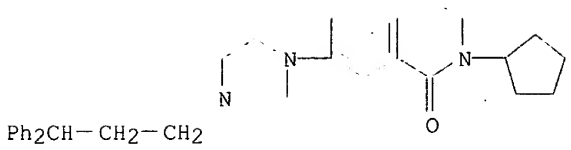
RN 217492-55-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



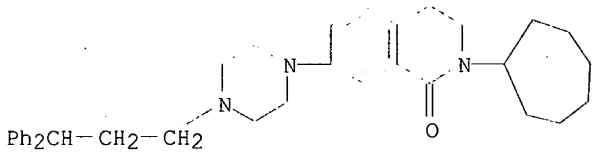
RN 217492-57-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



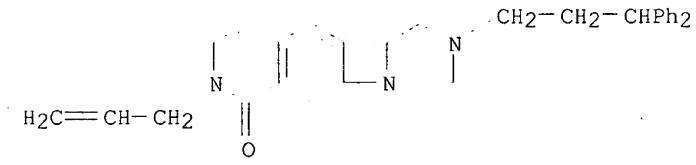
RN 217492-59-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



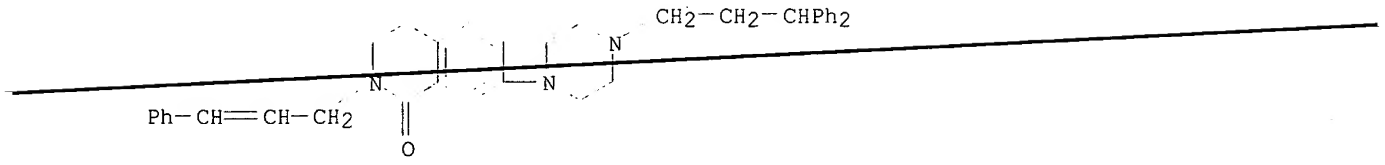
RN 217492-61-0 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



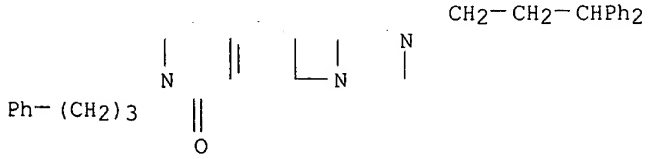
RN 217492-63-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



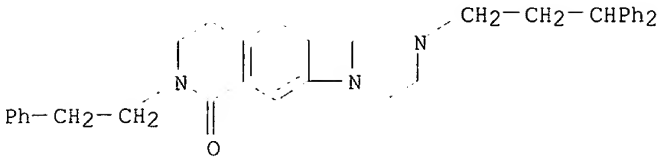
RN 217492-65-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



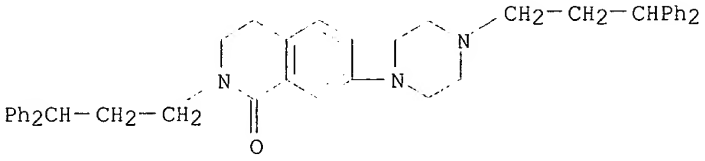
RN 217492-67-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



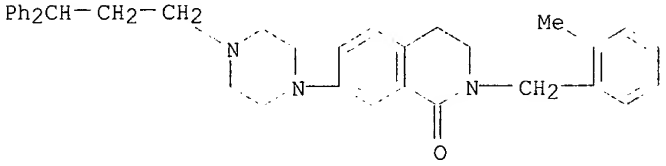
RN 217492-69-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



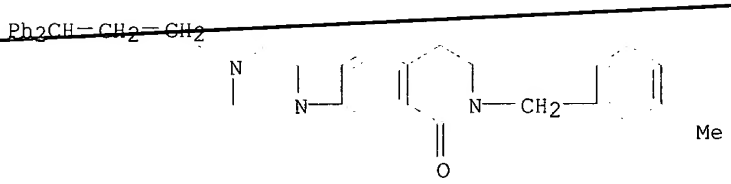
RN 217492-70-1 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



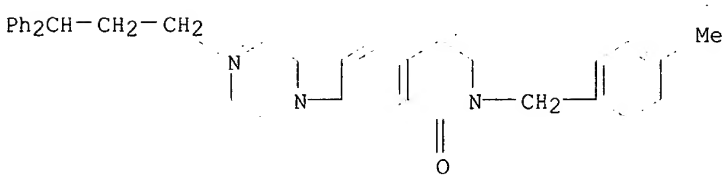
RN 217492-71-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



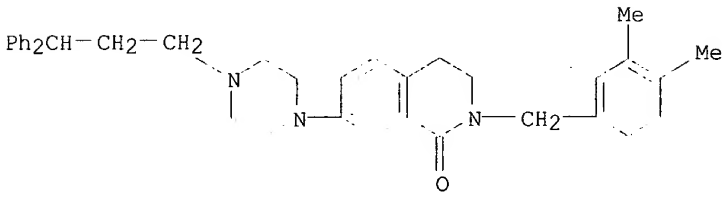
RN 217492-72-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



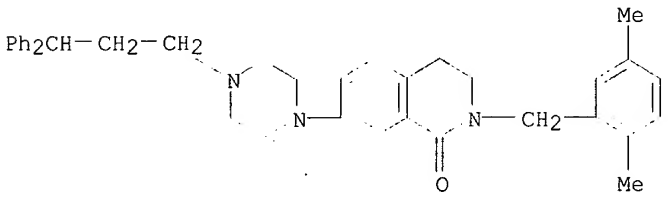
RN 217492-73-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



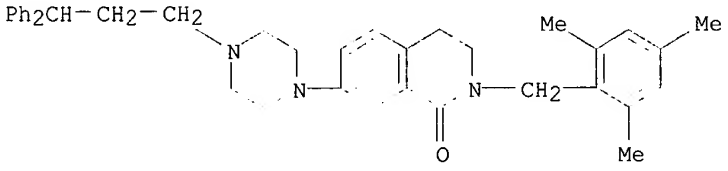
RN 217492-74-5 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



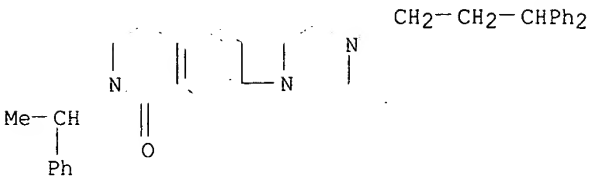
RN 217492-75-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



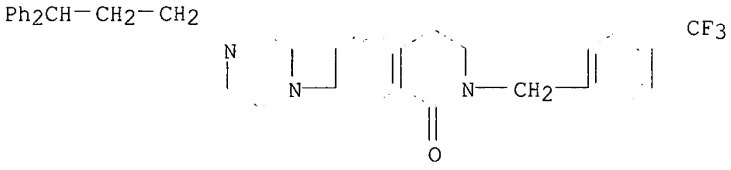
RN 217492-76-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



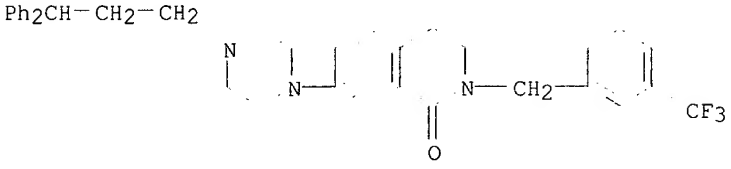
RN 217492-77-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



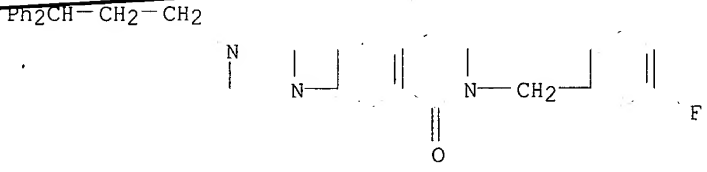
RN 217492-78-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



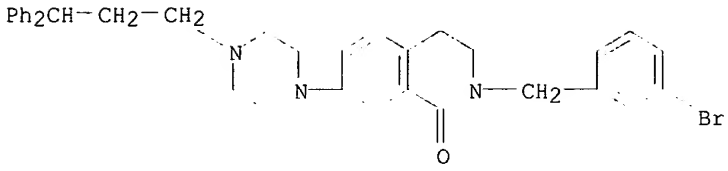
RN 217492-79-0 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



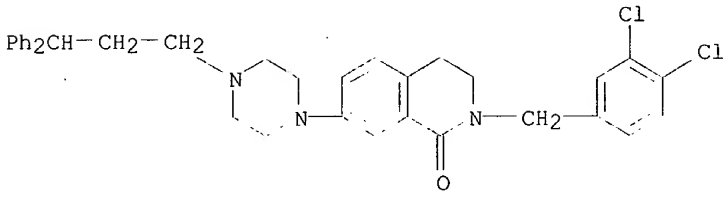
RN 217492-80-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



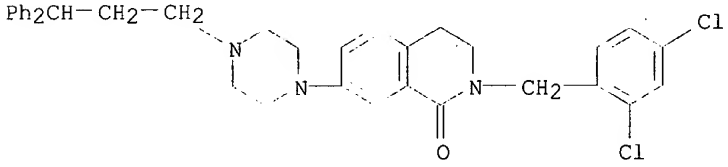
RN 217492-81-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



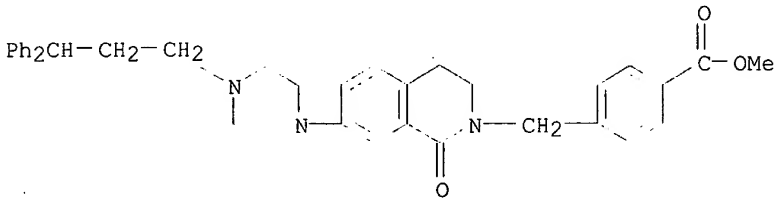
RN 217492-82-5 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-83-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-84-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-85-8 CAPLUS
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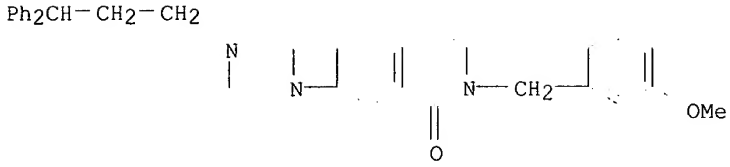
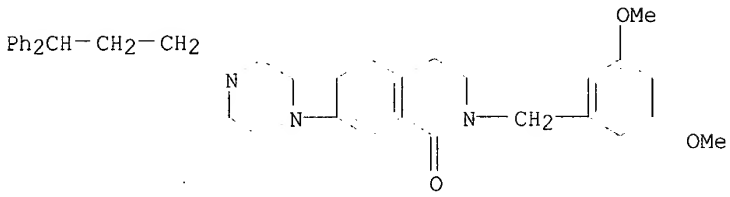
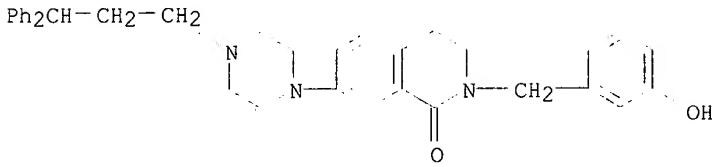


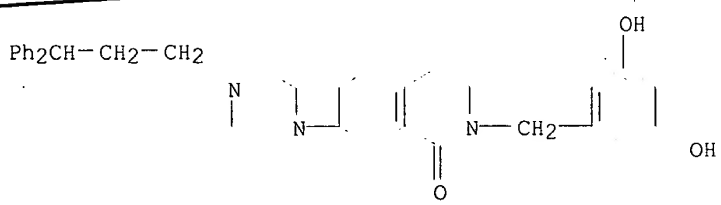
RN 217492-86-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



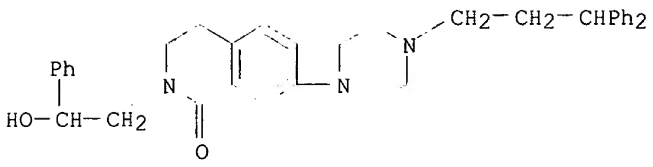
RN 217492-87-0 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



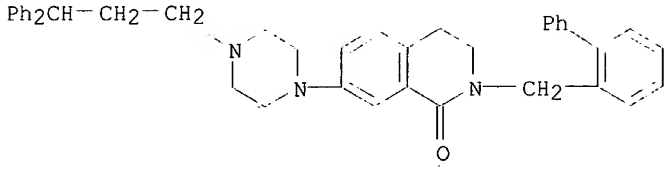
RN 217492-88-1 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



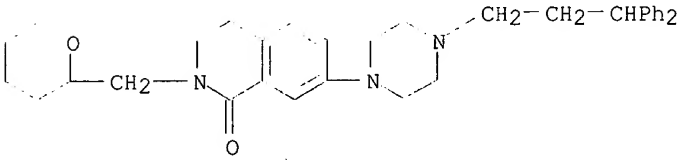
RN 217492-90-5 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



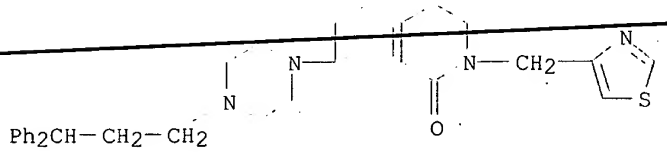
RN 217492-91-6 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



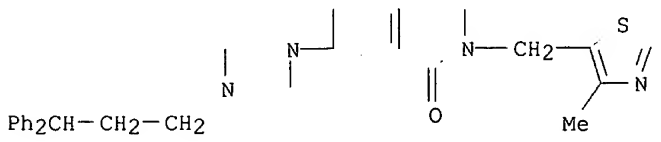
RN 217492-92-7 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-93-8 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

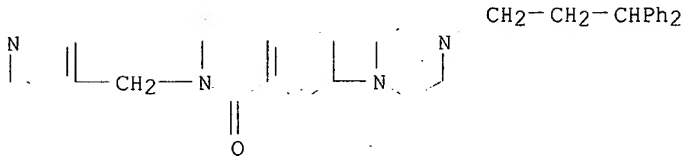


RN 217492-94-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

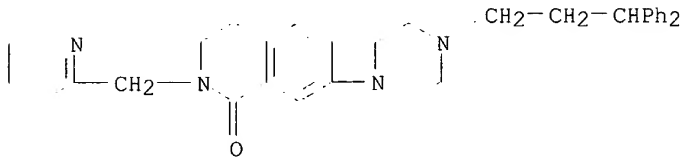


RN 217492-95-0 CAPLUS

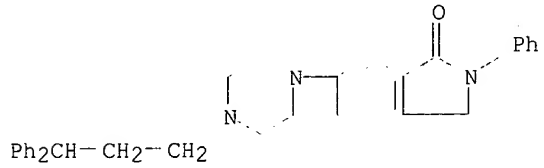
CN INDEX NAME NOT YET ASSIGNED



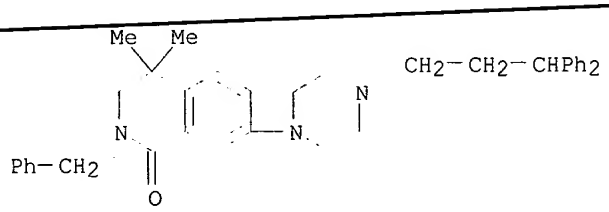
RN 217492-96-1 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



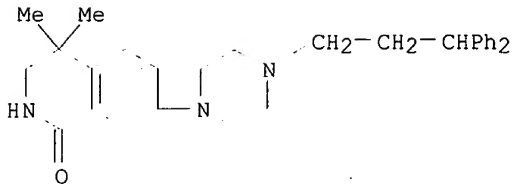
RN 217492-97-2 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 217492-98-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED



IT **217493-75-9**
RL: RCT (Reactant)
(prepn. of nitrogenous heterocyclic compds. as hyperlipemia remedies)
RN 217493-75-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

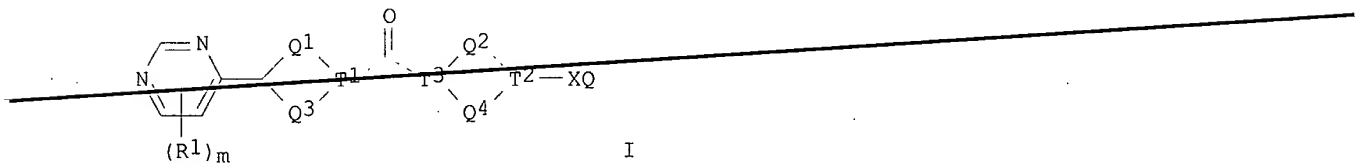

Me
Me
CH2—CH2—CHPh2
N
HN
N
O

=> d bib abs hitstr 2

L13 ANSWER 2 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1998:126242 CAPLUS
DN 128:192661
TI Preparation of pyrimidinylpiperidinylcarbonylpiperazines and related compounds as inhibitors of oxidosqualene cyclase.
IN Brown, George Robert; Newcombe, Nicholas John; Stokes, Elaine Sophie Elizabeth; Waterson, David
PA Zeneca Limited, UK; Brown, George Robert; Newcombe, Nicholas John; Stokes, Elaine Sophie Elizabeth; Waterson, David
SO PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9806705	A1	19980219	WO 97-GB2029	19970725
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9737017	A1	19980306	AU 97-37017	19970725
PRAI GB 96-17060		19960814		
GB 97-3027		19970214		
WO 97-GB2029		19970725		

OS MARPAT 128:192661
GI



I

AB Title compds. [I; T1, T3 = N, CR; R = H, alkyl, alkenyl, alkynyl; R1 = H, amino, halo, cyano, alkyl, alkylamino, dialkylamino, alkoxy; m = 1, 2; T2 = CH, N; Q = (substituted) Ph, naphthyl, phenylalkenyl, heteroaryl; Q1 = (CH2)a; Q2 = (CH2)b; Q3 = (CH2)c; Q4 = (CH2)d; X = O, CO, S, SO, SO2, CH2;
a, b = 2, 3; c, d = 1, 2], were prepd. as antihypercholesteremics. Thus, 4-[1-(4-pyrimidinyl)piperazin-4-ylcarbonyl]piperidine in CH2Cl2 was treated with a mixt. of 4-chlorophenylsulfonyl chloride and Et3N in CH2Cl2
under ice cooling followed by stirring for 18 h at room temp. to give 26% 1-(4-chlorophenylsulfonyl)-4-[1-(4-pyrimidinyl)piperazin-4-ylcarbonyl]piperidine. The latter at 5 mg/kg orally in rats gave 72%

inhibition of cholesterol biosynthesis.

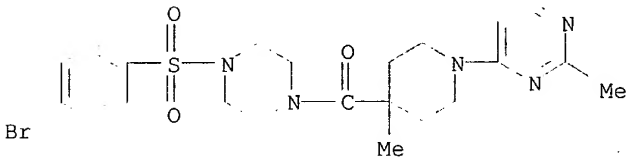
IT **203523-00-6P**

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyrimidinylpiperidinylcarbonylpiperazines and related compds. as inhibitors of oxidosqualene cyclase)

RN 203523-00-6 CAPLUS

CN Piperazine, 1-[(4-bromophenyl)sulfonyl]-4-[[4-methyl-1-(2-methyl-4-pyrimidinyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 3

L13 ANSWER 3 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1998:28740 CAPLUS
DN 128:88669
TI Preparation of diaryl antimicrobial agents
IN Kanojia, Ramesh M.; Demers, James P.; Hlasta, Dennis J.; Johnson, Sigmond G.; Klaubert, Dieter H.
PA Ortho Pharmaceutical Corp., USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

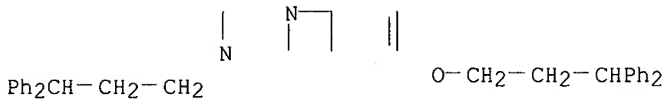
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9748674	A1	19971224	WO 97-US9955	19970606
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5773469	A	19980630	US 96-665653	19960618
AU 9734804	A1	19980107	AU 97-34804	19970606

PRAI US 96-665653 19960618
WO 97-US9955 19970606
OS MARPAT 128:88669
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; L = N, CH, C; G, E = (un) substituted Ph, phenylC1-4alkyl, 2-pyridyl, etc.; G and E together with L (when L = CH) = II, III; J = CH, O; q = 0-1; m = 0-6; X = O,S, NH, etc.; Ar = (un)substituted Ph, biphenyl, naphthyl; p = 0-1; W = O, S; n = 0-6; A = NR1R2, N+R1R2R3*Z-, NR1C(:NR2)NHR3, etc. (wherein R1-R3 = H, C1-6 alkyl, phenylC1-6alkyl; Z = pharmaceutically acceptable counterion)] and their salts, useful in treating bacterial infections, were prepd. Thus, treatment of tyramine with di-tert-Bu dicarbonate in THF followed by reacting the resulting N-(tert-butoxycarbonyl)-2-(4-hydroxyphenyl)ethylamine with 3,3-diphenylpropanol in the presence of di-Et azodicarboxylate, triphenylphosphine in THF, and deprotection of the resulting N-(tert-butoxycarbonyl)-2-[4-(3,3-diphenylpropoxy)phenyl]ethylamine with HCl/IPA afforded the title compd. IV.HCl which showed IC50 of 31.25 .mu.M against histidine protein kinase (HPK) in vitro assay.

IT **201043-63-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of diaryl antimicrobial agents)
RN 201043-63-2 CAPLUS
CN Piperazine, 1-[4-(3,3-diphenylpropoxy)phenyl]-4-(3,3-diphenylpropyl)- (9CI) (CA INDEX NAME)


N
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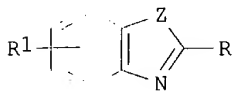
Ph2CH—CH2—CH2
O—CH2—CH2—CHPh2

=> d bib abs hitstr 4

L13 ANSWER 4 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1997:776083 CAPLUS
DN 128:34785
TI Preparation of 2-(piperazinoalkylamino)benzoxazoles and -thiazoles as dopamine D4 antagonists
IN Kennis, Ludo Edmond Josephine; Mertens, Josephus Carolus; Pieters, Serg Maria Aloysius
PA Belg.
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9743271	A1	19971120	WO 97-EP2505	19970502
	W: AL, AM, AU, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, LC, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN				
	RW: GE, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9729560	A1	19971205	AU 97-29560	19970502
PRAI	EP 96-201282		19960510		
	WO 97-EP2505		19970502		

OS MARPAT 128:34785
GI



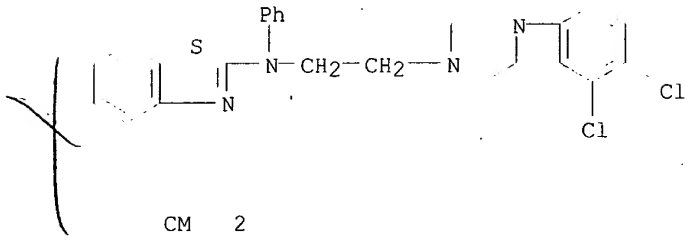
I

AB Title compds. [I; R = NR2(CH2)nZ1R3; Z1 = piperazine-1,4-diyl][II; R1 = H, halo, alkyl, alkoxy; R2 = H, (phenyl)alkyl, Ph, Bz; R3 = (un)substituted Ph or naphthyl; Z = O or S; n = 2-5] were prepd. Thus, 1-(3,4-dichlorophenyl)piperazine was N-alkylated by Cl(CH2)4CN and the hydrogenated product condensed with 2-chlorobenzothiazole to give II (R1 = R2 = H, R3 = C6H3Cl2-3,4, Z = S, n = 5). Data for biol. activity of II were given.

IT **199616-61-0P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-(piperazinoalkylamino)benzoxazoles and -thiazoles as dopamine D4 antagonists)
RN 199616-61-0 CAPLUS
CN 2-Benzothiazolamine, N-[2-[4-(3,4-dichlorophenyl)-1-piperazinyl]ethyl]-N-phenyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 199616-60-9
CMF C25 H24 Cl2 N4 S

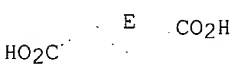


homology.

CM 2

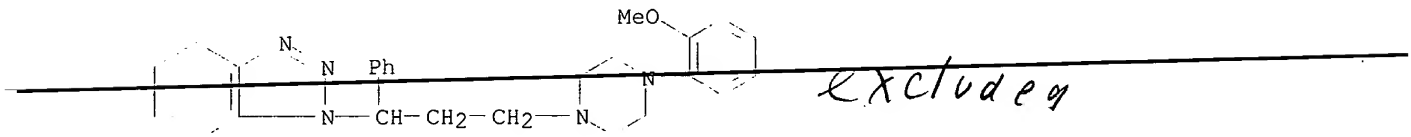
CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.



=> d bib abs hitstr 5

L13 ANSWER 5 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1997:687574 CAPLUS
DN 128:128
TI Structure-activity relationship studies of CNS agents. Part 32. Effect of structural modifications in 1-arylpiperazine derivatives on .alpha.1-adrenoreceptor affinity
AU Mokrosz, Maria J.; Paluchowska, Maria H.; Charakchieva-Minol, Sijka; Bien, Anna
CS Institute Pharmacology, Polish Academy Sciences, Krakow, 31343, Pol.
SO Arch. Pharm. (Weinheim, Ger.) (1997), 330(6), 177-180
CODEN: ARPMAS; ISSN: 0365-6233
PB Wiley-VCH
DT Journal
LA English
AB The .alpha.1-adrenergic and 5-HT1A serotonergic receptor affinities of a series of 1-arylpiperazines are presented. The role of the spacer and the influence of the terminal substituents on the .alpha.1-adrenoreceptor affinity and the 5-HT1A/.alpha.1 receptor selectivity are discussed.
IT **171415-34-2P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(structural modifications in 1-arylpiperazine derivs. effect on .alpha.1-adrenoreceptor affinity)
RN 171415-34-2 CAPLUS
CN 1H-Benzotriazole, 1-[3-[4-(2-methoxyphenyl)-1-piperazinyl]-1-phenylpropyl]- (9CI) (CA INDEX NAME)



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=> d bib abs hitstr 6

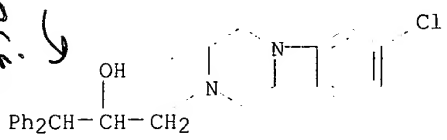
L13 ANSWER 6 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1997:588612 CAPLUS
DN 127:257915
TI Effects of selective h5-HT1B (SB-216641) and h5-HT1D (BRL-15572) receptor ligands on guinea pig and human 5-HT auto- and heteroreceptors
AU Schlicker, E.; Fink, K.; Molderings, G. J.; Price, G. W.; Duckworth, M.; Gaster, L.; Middlemiss, D. N.; Zentner, J.; Likungu, J.; Gothert, M.
CS Institut Pharmakologie Toxikologie, Universitat Bonn, Bonn, D-53113, Germany
SO Naunyn-Schmiedeberg's Arch. Pharmacol. (1997), 356(3), 321-327
CODEN: NSAPCC; ISSN: 0028-1298
PB Springer
DT Journal
LA English
AB Human cerebral cortical slices and synaptosomes, guinea-pig cerebral cortical slices and human right atrial appendages were used to study the effects of SB-216641, a preferential h5-HT1B receptor ligand, and of BRL-15572, a preferential h5-HT1D receptor ligand, on the presynaptic h5-HT1B and h5-HT1B-like autoreceptors in the human and guinea-pig brain prepns., resp., and on the presynaptic h5-HT1D heteroreceptors in the human atrium. The brain prepns., preincubated with [3H]serotonin ([3H]-5-HT), and the segments of atrial appendages, preincubated with [3H]noradrenaline, were superfused with modified Krebs' soln. and tritium overflow was evoked elec. (human and guinea-pig cerebral cortex slices and human atrial appendages) or by high K+ (human cerebral cortex synaptosomes). The elec. evoked tritium overflow from guinea-pig cerebral cortex slices was reduced by the 5-HT receptor agonist 5-carboxamidotryptamine (5-CT). This effect was not modified by BRL-15572 (2 .mu.M; concn. 154 times higher than its Ki at h5-HT1D receptors) but was antagonized by SB-216641 (0.1 .mu.M; concn. 100 times higher than its Ki at h5-HT1B receptors; apparent pA2 8.45). SB-216641 (0.1 .mu.M) by itself facilitated, whereas BRL-15572 (.mu.M) did not affect, the evoked overflow. In human cerebral cortex slices SB-216641 (0.1 .mu.M) also facilitated, and BRL-15572 (2 .mu.M) again failed to affect, the elec. evoked tritium overflow. In human cerebral cortical synaptosomes, 5-CT reduced the K+-evoked tritium overflow. This response was unaffected by BRL-15572 (300 nM) but antagonized by SB-216641 (15 nM; drug concns. 23 and 15 times higher than their Ki at h5 HT1D and h5-HT1B receptors, resp.). Both drugs, given alone, did not modify the K+-evoked tritium overflow. In human atrial appendages, the elec. evoked tritium overflow was inhibited by 5-HT in a manner susceptible to antagonism by BRL-15572 (300 nM; 23 times Ki at h5-HT1D receptors) but not by SB-216641 (30 nM; 30 times Ki at h5-HT1B receptors). Both drugs by themselves did not change the elec. evoked tritium overflow. In conclusion, SB-216641 behaves as a preferential antagonist at native human 5-HT1B receptors and BRL-15572 as a preferential antagonist at native human 5-HT1D receptors. These compds. are clearly useful tools for the differentiation between human 5-HT1B and 5-HT1D receptors in functional studies.
IT **193611-72-2**, BRL-15572
RL: BAC (Biological activity or effector, except adverse); BIOL

(Biological study)
(effects of selective 5-HT receptor ligands SB-216641 and BRL-15572 on guinea pig and human 5-HT auto- and heteroreceptors)

RN 193611-72-2 CAPLUS

CN 1-Piperazineethanol, 4-(3-chlorophenyl)-.alpha.-(diphenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

on wrong carbn. 6



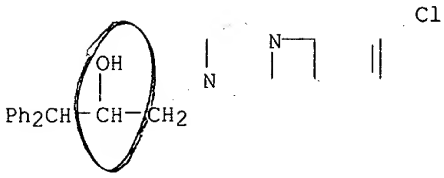
• 2 HCl

102

Same compd as on BNS.8 !

=> d bib abs hitstr 7

L13 ANSWER 7 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1997:588602 CAPLUS
DN 127:257483
TI SB-216641 and BRL-15572-compounds to pharmacologically discriminate h5-HT1B and h5-HT1D receptors
AU Price, G. W.; Burton, M. J.; Collin, L. J.; Duckworth, M.; Gaster, L.; Gothert, M.; Jones, B. J.; Roberts, C.; Watson, J. M.; Middlemiss, D. N.
CS Dep. Neuroscience, SmithKline Beecham Pharmaceuticals, Harlow, Essex, CM19 5AW, UK
SO Naunyn-Schmiedeberg's Arch. Pharmacol. (1997), 356(3), 312-320
CODEN: NSAPCC; ISSN: 0028-1298
PB Springer
DT Journal
LA English
AB Despite only modest homol. between h5-HT1B and h5-HT1D receptor amino acid sequences, these receptors display a remarkably similar pharmacol. To date there are few compds. which discriminate between these receptor subtypes and those with some degree of selectivity, such as ketanserin, have greater affinity for other 5-HT receptor subtypes. We now report on two compds., SB-216641 (N-[3-(2-dimethylamino)ethoxy-4-methoxyphenyl]-2'-methyl-4'-(5-methyl-1,2,4-oxadiazol-3-yl)-(1,1'-biphenyl)-4-carboxamide) and BRL-15572 3-[4-(3-chlorophenyl)piperazin-1-yl]-1,1-diphenyl-2-propanol, which display high affinity and selectivity for h5-HT1B and h5-HT1D receptors, resp. In receptor binding studies on human receptors expressed in CHO cells, SB-216641 has high affinity (pKi = 9.0) for h5-HT1B receptors and has 25-fold lower affinity at h5-HT1D receptors. In contrast, BRL-15572 has 60-fold higher affinity for h5-HT1D (pKi = 7.9) than 5-HT1B receptors. Similar affinities for these compds. were detd. on native tissue 5-HT1B receptors in guinea-pig striatum. Functional activities of SB-216641 and BRL-15572 were measured in a [35S]GTP-.gamma.S binding assay and in a cAMP accumulation assay on recombinant h5-HT1B and h5-HT1D receptors. Both compds. were partial agonists in these high receptor expression systems, with potencies and selectivities which correlated with their receptor binding affinities. In the cAMP accumulation assay, results from pKB measurements on the compds. again correlated with receptor binding affinities (SB-216641, pKB = 9.3 and 7.3; BRL-15572, pKB = <6 and 7.1, for h5-HT1B and h5-HT1D receptors resp.). These compds. will be useful pharmacol. agents to characterize 5-HT1B and 5-HT1D receptor mediated responses.
IT **193611-72-2**, BRL-15572
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(SB-216641 and BRL-15572 pharmacol. discriminate h5-HT1B and h5-HT1D receptors)
RN 193611-72-2 CAPLUS
CN 1-Piperazineethanol, 4-(3-chlorophenyl)-.alpha.-(diphenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



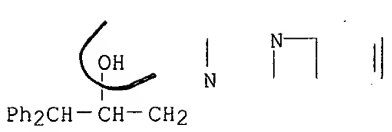
• 2 HCl

X 19

Same Comp as in #8

=> d bib abs hitstr 8

L13 ANSWER 8 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1997:453144 CAPLUS
DN 127:156586
TI Stimulation of 5-HT1B receptors causes hypothermia in the guinea pig
AU Hagan, Jim J.; Slade, Paula D.; Gaster, Laramie; Jeffrey, Phillip; Hatcher, Jonathan P.; Middlemiss, D. N.
CS Neuroscience Research, SmithKline Beecham Pharmaceuticals, New Frontiers Science Park North, Third Avenue, Harlow Essex, CM19 5AW, UK
SO Eur. J. Pharmacol. (1997), 331(2/3), 169-174
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English
AB The selective, brain penetrant, 5-HT1B/D (formerly 5-HT1D.beta./.alpha.) receptor agonist SKF-99101H (3-(2-dimethylaminoethyl)-4-chloro-5-propoxyindole hemifumarate) (30 mg/kg i.p.) causes a dose related fall in rectal temp. in guinea pigs which previous studies have shown to be blocked by the non-selective 5-HT1B/D receptor antagonist GR-127935 (N-[4-methoxy-3-(4-methyl-1-piperazinyl) phenyl]-2'-methyl-4'-(5-methyl-1,2,4-oxadiazol-3-yl) [1,1'biphenyl]-4-carboxamide oxalate). The present study shows that the hypothermic response to SKF-99101H is dose-dependently blocked by SB-224289G (1'-methyl-5-(2'-methyl-4'-[(5-methyl-1,2,4-oxadiazol-3-yl)biphenyl-4-yl]carbonyl)-2,3,6,7-tetrahydrospiro[furo[2,3-f]indole-3,4'-piperidone] hemioxalate) (0.3-10.0 mg/kg p.o.) (ED50 3.62 mg/kg), which is the first compd. to be described which is more than 60 fold selective for the 5-HT1B receptor over the 5-HT1D receptor. SB-216641A (N-[3-(2-dimethylamino) ethoxy-4-methoxy-phenyl] 2'-methyl-4'-(5-methyl-1,2,4-oxadiazol-3-yl)-(1,1'-biphenyl)-4-carboxamide hydrochloride) (0.6-20.0 mg/kg i.p.), which is somewhat less selective (30 fold) for the 5-HT1B receptor over the 5-HT1D receptor had a similar effect (ED50 4.43 mg/kg). The brain penetrant 5-HT1D selective receptor antagonist, BRL-15572 (4-(3-chlorophenyl)-.alpha.-(diphenylmethyl)-1-piperazineethanol dihydrochloride) (0.3-100.0 mg/kg i.p.) was inactive. When administered alone neither BRL-15572 (0.1-10 mg/kg i.p.) nor SB-224289G (2.2-22 mg/kg p.o.) had an effect on body temp. These data demonstrate that 5-HT1B (formerly 5-HT1D.beta.) and not 5-HT1D (formerly 5-HT1D.alpha.) receptors mediate the hypothermic response to SKF-99101H (30 mg/kg i.p.) in guinea pigs. The compds. described are useful pharmacol. tools for distinguishing responses to 5-HT1B and 5-HT1D receptors.
IT **193611-72-2**, BRL 15572
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(pharmacol. tools for distinguishing responses to 5-HT1B and 5-HT1D receptors)
RN 193611-72-2 CAPLUS
CN 1-Piperazineethanol, 4-(3-chlorophenyl)-.alpha.-(diphenylmethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



• 2 HCl

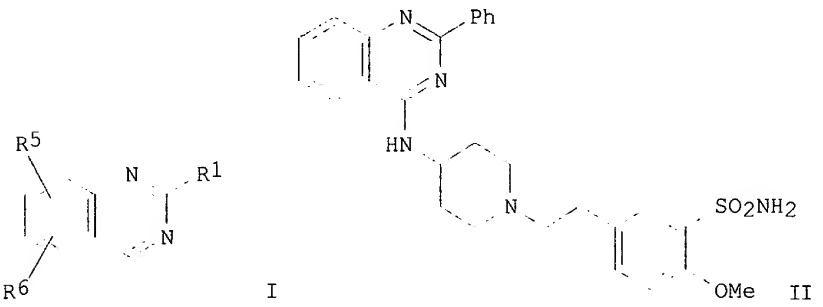
OH on Wrong Carbon

=> d bib abs hitstr 9

L13 ANSWER 9 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1996:567069 CAPLUS
DN 125:221856
TI Preparation of quinazoline derivatives as adrenergic .alpha.1C receptor antagonists
IN Andrews, Robert Carl; Brown, Peter Jonathan; Deaton, David Norman; Drewry, David Harold; Foley, Michael Andrew; Garrison, Deanna T.; Marron, Brian Edward; Smalley, Terrence L.; Berman, Judd M.; Noble, Stewart Alywyn
PA Glaxo Inc, USA
SO Brit. UK Pat. Appl., 190 pp.
CODEN: BAXXDU
DT Patent
LA English
FAN.CNT 1

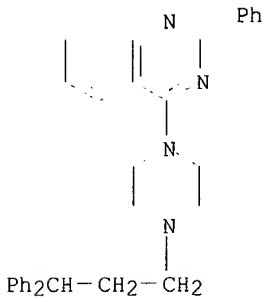
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2295387	A1	19960529	GB 94-23635	19941123

OS MARPAT 125:221856
GI



I II

AB Title compds. [I; R = Z1Z2 = R4; R1 = H, halo, alkyl, alkoxy, etc.; R4 = H, (di)(alkyl)amino, phenyl(oxy), etc.; R5,R6 = H, OH, halo, alkyl, alkoxy; Z1 = NH, 2-(piperazine-1,4-diyl)ethylimino, iminopyridine-5,2-diylimino, etc.; Z2 = bond, (un)substituted alkylene] were prepd. as adrenergic .alpha.1C receptor antagonists (no data). Thus, 4-chloro-2-phenylquinazoline was aminated by 4-amino-1-benzylpiperidine and the deprotected product N-alkylated by 5-(2-chloroethyl)-2-methoxybenzenesulfonamide (prepn. given) to give title compd. II.
IT **181114-29-4P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of quinazoline derivs. as adrenergic .alpha.1C receptor antagonists)
RN 181114-29-4 CAPLUS
CN Quinazoline, 4-[4-(3,3-diphenylpropyl)-1-piperazinyl]-2-phenyl- (9CI) (CA INDEX NAME)



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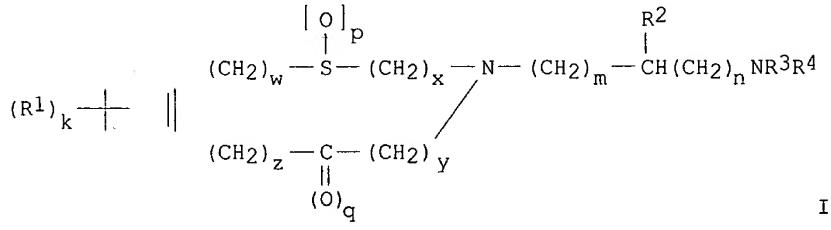
=> d bib abs hitstr 10

L13 ANSWER 10 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1995:996307 CAPLUS
DN 124:146182
TI Preparation of benzothiazine derivatives for inhibiting dysuria
IN Masaki, Mitsuo; Miyake, Norihisa; Tendo, Atsushi; Ishida, Michiko; Shinozaki, Atsuhiko; Nomura, Yutaka; Goto, Yasunori
PA Nippon Chemiphar Co., Ltd., Japan
SO PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9526959	A1	19951012	WO 95-JP632	19950331
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
JP 07278125	A2	19951024	JP 94-85831	19940331
AU 9520849	A1	19951023	AU 95-20849	19950331
JP 08003152	A2	19960109	JP 95-100505	19950331
EP 753514	A1	19970115	EP 95-913402	19950331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1148853	A	19970430	CN 95-193184	19950331
US 5773437	A	19980630	US 96-722112	19960930
PRAI JP 94-85831	19940331			
JP 94-103345	19940418			
WO 95-JP632	19950331			

OS MARPAT 124:146182
GI



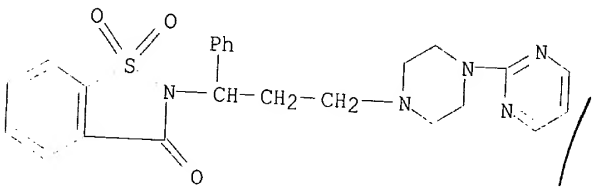
I

AB The title compds. I [R1 represents hydrogen, alkyl, halogen, haloalkyl, hydroxy, alkoxy, nitro, amino, cyano, etc.; R2 represents hydrogen, alkyl, aryl, etc.; R3 and R4 represent each alkyl, etc., or R3 and R4 are combined together to form an optionally substituted heterocyclic group; k represents an integer of 1 to 4; m and n represent each an integer of 0 to

z 4; p+q = 0 to 4, wherein p is 0, 1 or 2 and q is 0 or 1; and w, x, y and represent each an integer of 0 to 2, and w+x+y+z = 1 or 2, provided when R1 to R4 represent each a specifically limited group, w+x+y+z may be 0] are prepd. 2-[3-(4-Phenoxypiperidino)propyl]-2H-1,2-benzothiazin-4(3H)-one 1,1-dioxide hydrochloride (II) was prepd. in several steps starting from 2H-1,2-benzothiazin-4(3H)-one 1,1-dioxide ethylene ketal. II at 1 mg/kg i. v. inhibited urinary bladder contractions in rats.

IT **173365-96-3P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzothiazine derivs. for inhibiting dysuria)

RN 173365-96-3 CAPLUS
CN 1,2-Benzisothiazol-3(2H)-one, 2-[1-phenyl-3-[4-(2-pyrimidinyl)-1-piperazinyl]propyl]-, 1,1-dioxide, monohydrochloride (9CI) (CA INDEX NAME)



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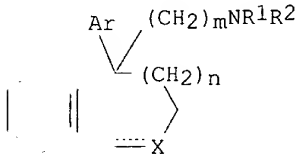
• HCl

=> d bib abs hitstr 11

L13 ANSWER 11 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1995:995626 CAPLUS
DN 124:145926
TI Preparation of aminoalkylisochromans, -isoquinolines, and related compounds as gonadotropin-releasing hormone antagonists, calcium antagonists, and/or monoamine uptake inhibitors.
IN Kato, Kaneyoshi; Sugiura, Yoshihiro; Kato, Koichi; Nagai, Yasuo
PA Takeda Chemical Industries, Ltd., Japan
SO Eur. Pat. Appl., 104 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

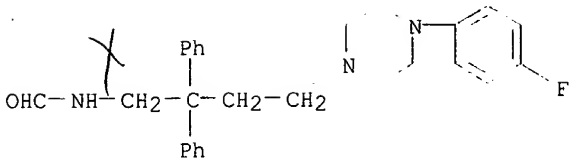
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 679642	A1	19951102	EP 95-106189	19950426
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	US 5607939	A	19970304	US 95-428499	19950425
	CA 2148047	AA	19951029	CA 95-2148047	19950427
	JP 08012650	A2	19960116	JP 95-103389	19950427
	US 5654296	A	19970805	US 96-760904	19961206
PRAI	JP 94-114054	19940428			
	JP 94-92769	19940428			
	US 95-428499	19950425			

OS MARPAT 124:145926
GI

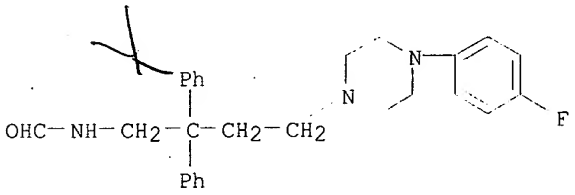


I

AB Title compds. (I; Ar = arom. group; R1, R2, R3 = H, acyl, hydrocarbyl; R1R2N = heterocyclyl; m = 1-6; n = 2, 3; dotted line = optional double bond; X = O, NR3, N:), were prepd. Thus, 4-(2-iodoethyl)-4-phenylisochroman and imidazole were stirred with K2CO3 in MeCN for 4 days at 60.degree. to give 4-phenyl-4-[2-(1-imidazolyl)ethyl]isochroman, isolated as the hydrochloride. I inhibited 5-HT uptake in rat brain prepns. with IC50 = 0.03-1.0 .mu.M. I drug formulations are given.
IT **173272-96-3**
RL: RCT (Reactant)
(prepn. of aminoalkylisochromans, -isoquinolines, and related compds. as gonadotropin-releasing hormone antagonists, calcium antagonists, and/or monoamine uptake inhibitors)
RN 173272-96-3 CAPLUS
CN Formamide, N-[4-[4-(4-fluorophenyl)-1-piperazinyl]-2,2-diphenylbutyl]- (9CI) (CA INDEX NAME)



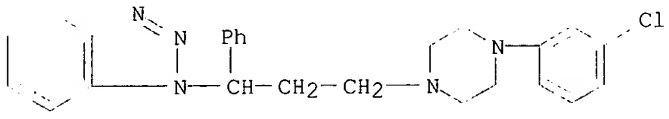
IT **173272-74-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of aminoalkylisochromans, -isoquinolines, and related compds. as gonadotropin-releasing hormone antagonists, calcium antagonists, and/or monoamine uptake inhibitors)
RN 173272-74-7 CAPLUS
CN Formamide, N-[4-[4-(4-fluorophenyl)-1-piperazinyl]-2,2-diphenylbutyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

=> d bib abs hitstr 12

L13 ANSWER 12 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1995:801125 CAPLUS
DN 124:8755
TI Structure-activity relationship studies of CNS agents. Part 22. A search for new trazodone-like antidepressants: synthesis and preliminary receptor binding studies
AU Mokrosz, Jerzy L.; Duszynska, Beata; Paluchowska, Maria H.; Charakchieva-Minol, S.; Mokrosz, Maria J.
CS Institute Pharmacology, Polish Academy Sciences, Krakow, 31-343, Pol.
SO Arch. Pharm. (Weinheim, Ger.) (1995), 328(7-8), 623-5
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA English
AB New 1-phenyl- and 1-(3-chlorophenyl)piperazines contg. a 4-[3-(heterocyclic)propyl] fragment were synthesized. Several derivs. were selected as good candidates for new, potential antidepressants on the basis of their 5-HT1A/5-HT2A receptor binding profiles.
IT **171112-91-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and 5-HT1A/5-HT2A receptor binding profiles of (heterocyclylpropyl)-substituted piperazines)
RN 171112-91-7 CAPLUS
CN 1H-Benzotriazole, 1-[3-[4-(3-chlorophenyl)-1-piperazinyl]-1-phenylpropyl]-, dihydrochloride (9CI) (CA INDEX NAME)



excluded. • 2 HCl

=> d bib abs hitstr 13

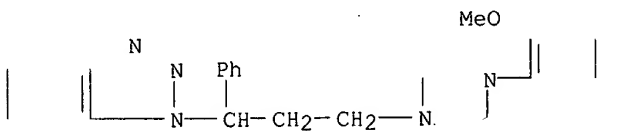
L13 ANSWER 13 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1995:801121 CAPLUS
DN 124:8013
TI Structure-activity relationship studies of CNS agents. Part 23. N-(3-phenylpropyl)- and N-[(E)-cinnamyl]-1,2,3,4-tetrahydroisoquinoline mimic 1-phenylpiperazine at 5-HT1A receptors
AU Mokrosz, Jerzy L.; Bojarski, Andrzej J.; Charakchieva-Minol, Sijka; Duszynska, Beata; Mokrosz, Maria J.; Paluchowska, Maria H.
CS Institute Pharmacology, Polish Academy Sciences, Krakow, 31-343, Pol.
SO Arch. Pharm. (Weinheim, Ger.) (1995), 328(7-8), 604-8
CODEN: ARPMAS; ISSN: 0365-6233
DT Journal
LA English
OS CASREACT 124:8013
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The 5-HT1A receptor affinities and ionization consts. of a set of 1-arylpiperazine, 1,2,3,4-tetrahydroisoquinoline, and -quinoline contg. N-(.omega.-arylalkyl) or N-(E)-cinnamyl substituents as well as two morpholine derivs. (I, II) were detd. It was shown that some tetrahydroisoquinoline (III, IV) and morpholine (I) derivs. were 5-HT1A ligands equipotent to 1-phenylpiperazine (V) and 1,2,3,4,4a,5-hexahydropyrazino[1,2-a]indole (VI). On the basis of mol. modeling studies it was also demonstrated that III, IV and I mimicked very well the ref. structures of V and its rigid analog VI. Another, more complex 1,2,3,4-tetrahydroisoquinoline deriv. VII, which served as a model compd. to confirm the previously reported 5-HT1A binding mode of other 1-phenyl-1,2,3,4-tetrahydroisoquinolinone derivs., had the highest 5-HT1A affinity (Ki = 6.7 .+-. 0.5 nM) of all the investigated compds.

IT **171415-34-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(QSAR of CNS agents N-(3-phenylpropyl)- and N-[(E)-cinnamyl]-1,2,3,4-tetrahydroisoquinoline as 1-phenylpiperazine mimics at 5-HT1A receptors)

RN 171415-34-2 CAPLUS
CN 1H-Benzotriazole, 1-[3-[4-(2-methoxyphenyl)-1-piperazinyl]-1-phenylpropyl]- (9CI) (CA INDEX NAME)



exclude

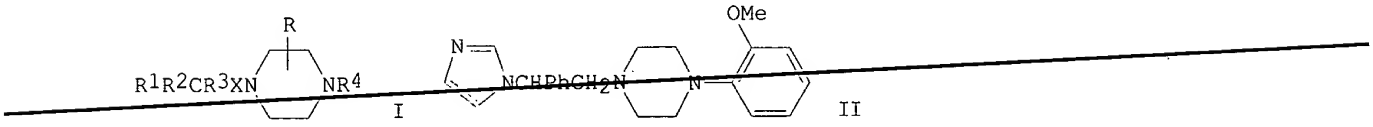
=> d bib abs hitstr 14

L13 ANSWER 14 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1992:490321 CAPLUS
DN 117:90321
TI Piperazine derivatives
IN Ward, Terence James; Warrellow, Graham John
PA John Wyeth and Brother Ltd., UK
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 479546	A2	19920408	EP 91-308969	19911001
EP 479546	A3	19920603		
EP 479546	B1	19961030		
R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE				
AU 9184883	A1	19920409	AU 91-84883	19910930
AU 642532	B2	19931021		
US 5177078	A	19930105	US 91-768147	19910930
GB 2248616	A1	19920415	GB 91-20856	19911001
GB 2248616	B2	19940615		
JP 04257570	A2	19920911	JP 91-253585	19911001
AT 144772	E	19961115	AT 91-308969	19911001
ES 2094204	T3	19970116	ES 91-308969	19911001
CA 2052619	AA	19920404	CA 91-2052619	19911002
HU 59394	A2	19920528	HU 91-3160	19911003
PRAI GB 90-21453		19901003		

OS MARPAT 117:90321
GI

Applied.

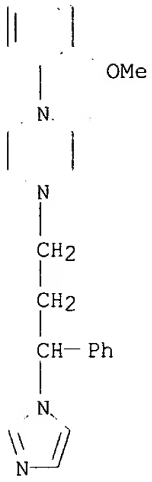


I II

AB Piperazines I (X = alkylene; R = H, alkyl; R1, R4 = aryl, heteroaryl; R2 = mono- or bicyclic heterocyclic; R3 = H, OH, alkyl) were prepd. Thus, 1-(2-methoxyphenyl)piperazine was treated with styrene oxide followed by imidazole to give the piperazine II. II had 5-hydroxytryptamine type 1A receptor antagonist activity in rats at a min. ED of 1 mg/kg s.c. and 10 mg/kg orally.

IT **141733-62-2P 141733-71-3P 142234-34-2P 142234-35-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 141733-62-2 CAPLUS
CN Piperazine, 1-[3-(1H-imidazol-1-yl)-3-phenylpropyl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



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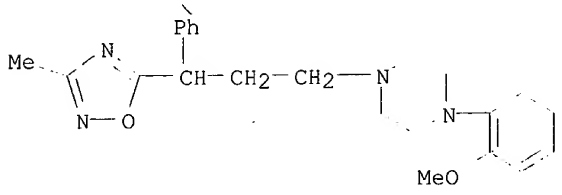
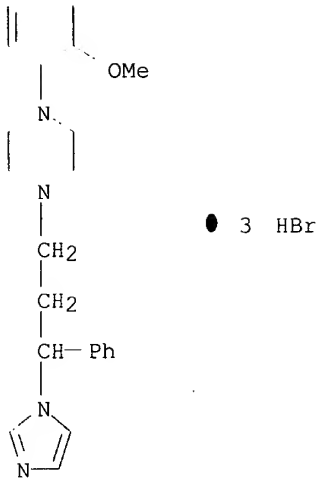
RN 141733-71-3 CAPLUS
CN Piperazine, 1-(2-methoxyphenyl)-4-[3-(3-methyl-1,2,4-oxadiazol-5-yl)-3-phenylpropyl]- (9CI) (CA INDEX NAME)

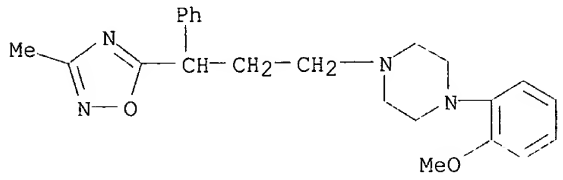


RN 142234-34-2 CAPLUS
CN Piperazine, 1-[3-(1H-imidazol-1-yl)-3-phenylpropyl]-4-(2-methoxyphenyl)-, trihydrobromide (9CI) (CA INDEX NAME)



• 3 HBr

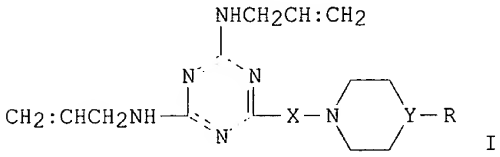
RN 142234-35-3 CAPLUS
CN Piperazine, 1-(2-methoxyphenyl)-4-[3-(3-methyl-1,2,4-oxadiazol-5-yl)-3-phenylpropyl]-, dihydrochloride (9CI) (CA INDEX NAME)



• 2 HCl

=> d bib abs hitstr 15

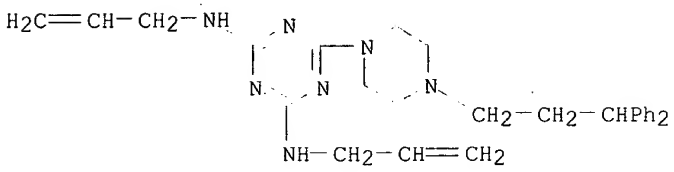
L13 ANSWER 15 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1992:426513 CAPLUS
DN 117:26513
TI New triazine derivatives as potent modulators of multidrug resistance
AU Dhainaut, Alain; Regnier, Gilbert; Atassi, Ghanem; Pierre, Alain; Leonce, Stephane; Kraus-Berthier, Laurence; Prost, Jean Francois
CS Inst. Rech. Servier, Suresnes, 92150, Fr.
SO J. Med. Chem. (1992), 35(13), 2481-96
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
OS CJACS
GI



I

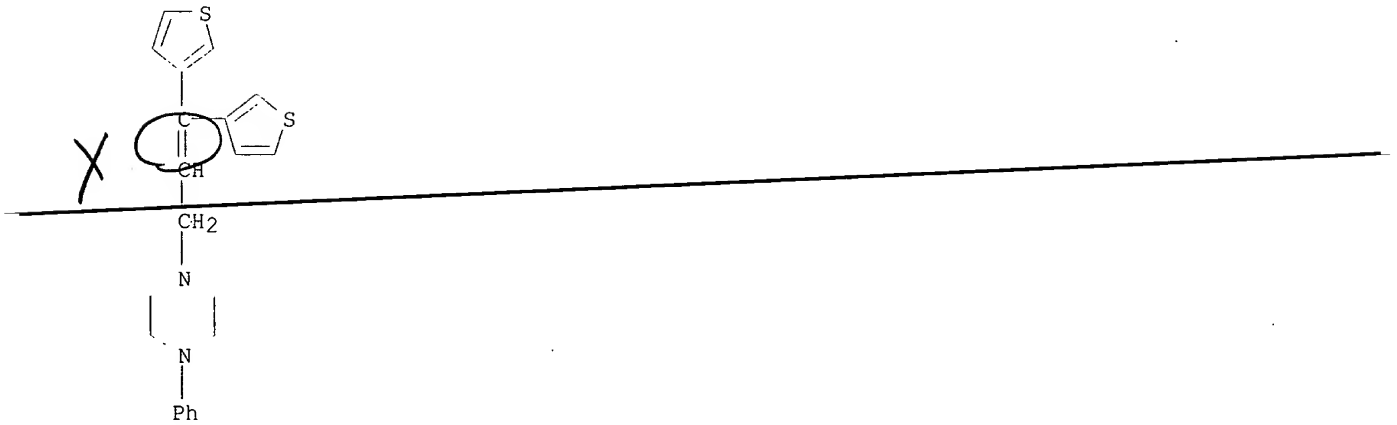
AB 70 Triazines, e.g., I (X = bond, NH, aminoalkylene; Y = N; R = diarylalkyl, dibenzocycloheptenyl, dibenzoheteroaryl) were prepd. from chlorotrazines and tested for their capacity to modulate multidrug resistance (MDR) in DC-3F/AD and KB-A1 tumor cells in vitro, in comparison with verapamil (VRP), a calcium channel antagonist currently used in therapy as an antihypertensive drug, which also shows MDR modulating activity. Among the 12 selected compds., I [X = bond, Y = CH, R = NHCH2CH(C6H4F-4)2] (II) (S9788) showed high MDR reversing properties in vitro (300- and 6-fold VRP at 5 .mu.M in DC-3F/AD and KB-A1 cells, resp.) and induced a strong accumulation of adriamycin. The relationship between the increase of ADR accumulation and the fold reversal induced by these compds. and their lack of effects on the sensitive DC-3F cells suggest that they act mainly by inhibiting the Pgp-catalyzed efflux of cytotoxic agents, as already described for a majority of MDR modulators. In vivo, in assocn. with the antitumor drug vincristine (0.25 mg/kg), II (100 mg/kg) increased the T/C by 39% in mice bearing the resistant tumor cell line P388/VCR. According to these interesting properties, II was selected for a clin. development because it was more bioavailable than I [X = bond, Y = CH, R = (dibenzo[a,d]cyclohepten-5-ylmethyl)amino] , even though it was less active.
IT **27469-55-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as modulator for multidrug resistance)
RN 27469-55-2 CAPLUS
CN 1,3,5-Triazine-2,4-diamine, 6-[4-(3,3-diphenylpropyl)-1-piperazinyl]-N,N'-di-2-propenyl- (9CI) (CA INDEX NAME)

excluded



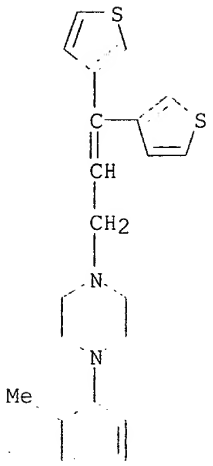
=> d bib abs hitstr 16

L13 ANSWER 16 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1981:586978 CAPLUS
DN 95:186978
TI Synthesis of geminal 3,3-dithienyl compounds
AU Kleemann, A.; Heese, J.; Engel, J.
CS Pharmaforsch. Chemiewerk Homburg, Zweigniederlassung Degussa, Frankfurt/Main, Fed. Rep. Ger.
SO Arzneim.-Forsch. (1981), 31(8), 1178-83
CODEN: ARZNAD; ISSN: 0004-4172
DT Journal
LA German
AB (R)-(+)-R2C:CHCH2NHCHMeCHPhOH (I; tinofedrine; R = 3-thienyl throughout) was prepd. by the reaction of RLi with BrCH2CH2CO2Et to give 96% HOCR2CH2CH2Br (II), which reacted with (-)-norephedrine to give 69% HOCR2CH2CH2NHCHMeCHPhOH.HCl, which was dehydrated by HCl in EtOH to give 75% I.HCl. Stereoisomers of I and analogs R2C:CH(CH2)nR1R2 [NR1R2 = NHCMe3, (substituted)piperazinyl, NMe2, piperidino, morpholino, etc; n = 1,2,3] were prepd. by the reaction of II with the appropriate amine. Several of these compds. increased blood flow in the arteriae vertebralis and femoralis in dogs.
IT **67822-07-5P 67822-08-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cerebral vasodilatory activity of)
RN 67822-07-5 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 67822-08-6 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(2-methylphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)

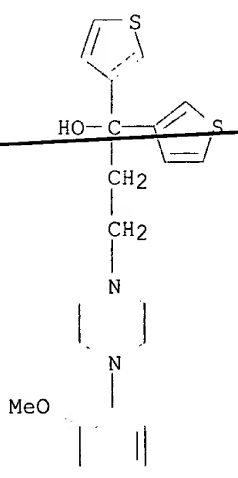


• 2 HCl

IT **79438-34-9P 79438-35-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and dehydration of)
RN 79438-34-9 CAPLUS
CN 1-Piperazinepropanol, 4-(2-methoxyphenyl)-.alpha.,.alpha.-di-3-thienyl-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 67821-80-1
CMF C22 H26 N2 O2 S2



intermed ?

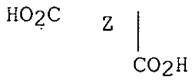
#026

excluded

CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



RN 79438-35-0 CAPLUS
CN 1-Piperazinepropanol, 4-(3-methoxyphenyl)-.alpha.,.alpha.-di-3-thienyl-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

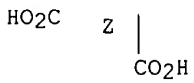
CM 1

CRN 67821-86-7
CMF C22 H26 N2 O2 S2

CM 2

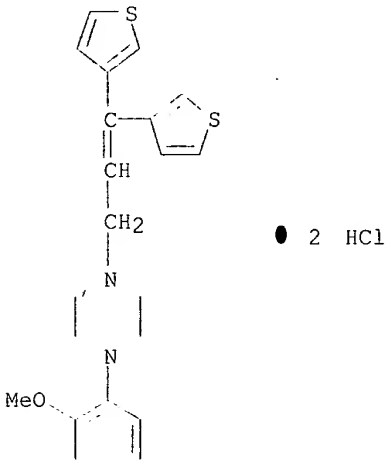
CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



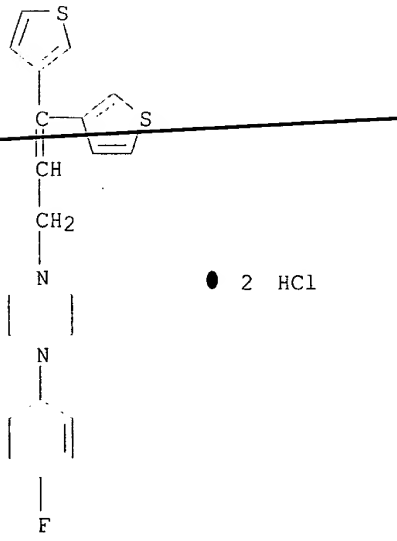
IT **67822-00-8P 67822-01-9P 67822-02-0P**
67822-03-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 67822-00-8 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(2-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



• 2 HCl

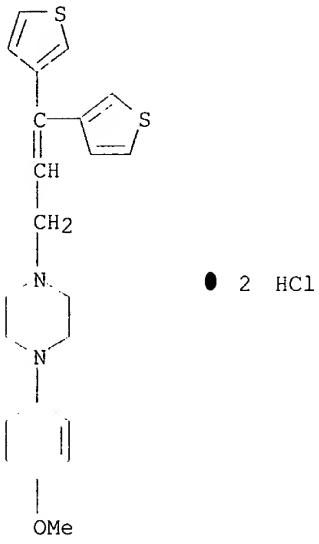
RN 67822-01-9 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(4-fluorophenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



• 2 HCl

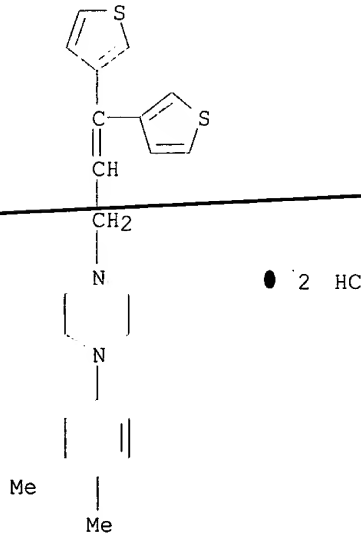
RN 67822-02-0 CAPLUS

CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(4-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



• 2 HCl

RN 67822-03-1 CAPLUS
CN Piperazine, 1-(3,4-dimethylphenyl)-4-(3,3-di-3-thienyl-2-propenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



• 2 HCl

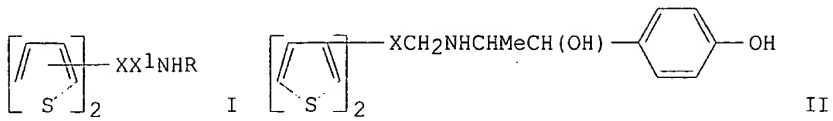
=> d bib abs hitstr 17

L13 ANSWER 17 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1978:579845 CAPLUS
DN 89:179845
TI Dithienylalkylamines
IN Kleemann, Axel; Nubert, Ingomar; Stroman, Fritz; Thiemer, Klaus
PA Deutsche Gold- und Silber-Scheideanstalt vorm. Roessler, Ger.
SO Ger. Offen., 64 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2800535	A1	19780713	DE 78-2800535	19780107
	GB 1597591	A	19810909	GB 77-1121	19770112
	GB 1597593	A	19810909	GB 80-22580	19770112
	GB 1597592	A	19810909	GB 80-42000	19770112
	US 4206213	A	19800603	US 78-867157	19780105
	BE 862800	A1	19780710	BE 78-46306	19780110
	DD 136265	C	19790627	DD 78-203159	19780110
	DD 142883	C	19800716	DD 78-212127	19780110
	FI 7800083	A	19780713	FI 78-83	19780111
	DK 7800124	A	19780713	DK 78-124	19780111
	NO 7800101	A	19780713	NO 78-101	19780111
	SE 7800326	A	19780713	SE 78-326	19780111
	NL 7800350	A	19780714	NL 78-350	19780111
	ES 465896	A1	19780916	ES 78-465896	19780111
	ES 465897	A1	19780916	ES 78-465897	19780111
	ZA 7800174	A	19781129	ZA 78-174	19780111
	IN 147465	A	19800308	IN 78-CA35	19780111
	SU 747426	D	19800723	SU 78-2563907	19780111
	AT 7800189	A	19801015	AT 78-189	19780111
	AT 362355	B	19810511		
	HU 20344	O	19810728	HU 78-DE1033	19780111
	HU 177978	P	19820228		
	HU 20590	O	19810828	HU 78-DE949	19780111
	HU 178208	P	19820328		
	FR 2377396	A1	19780811	FR 78-792	19780112
	FR 2377396	B1	19820507		
	JP 53101362	A2	19780904	JP 78-2333	19780112
	AU 7832392	A1	19790719	AU 78-32392	19780112
	AU 522750	B2	19820624		
	FR 2382449	A1	19780929	FR 78-19759	19780703
	FR 2382449	B1	19820219		
	US 4254269	A	19810303	US 79-56838	19790712
	US 4281010	A	19810728	US 79-56840	19790712
	AT 7907073	A	19801015	AT 79-7073	19791102
	AT 362356	B	19810511		
	IN 149408	A	19811128	IN 80-CA92	19800125
	NO 8203010	A	19780713	NO 82-3010	19820906
PRAI	GB 77-1121	19770112			
	GB 77-1120	19770112			
	US 78-867157	19780105			
	AT 78-189	19780111			
	IN 78-CA35	19780111			

103

GI



AB Vasodilator (no data) dithienylalkylamines I [X = C(OH)CH2, C:CH; X1 = C1-5 alkylene; R = C3-7 cycloalkyl, optionally substituted CH2Ph, C1-6 alkyl, aminoalkyl, phenylpiperazino] were prepd. Thus, treating 3-bromothiophene with BuLi and BrCH2CH2CO2Et gave 96% 1,1-bis(3-thienyl)-3-bromo-1-propanol, which (45.5 g) was treated with 25 g p-hydroxynorephedrine to give 15 g II [X = C(OH)CH2]. The last was dehydrated to II (X = C:CH) with HCl.

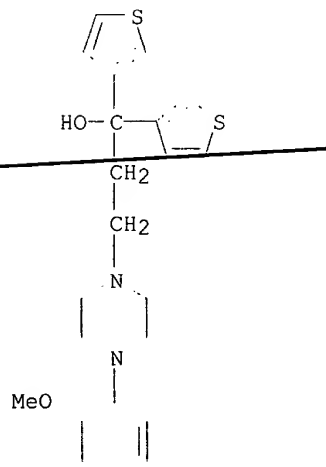
IT **67821-81-2P 67821-87-8P 67822-00-8P 67822-01-9P 67822-02-0P 67822-03-1P 67822-06-4P 67822-07-5P 67822-08-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 67821-81-2 CAPLUS

CN 1-Piperazinepropanol, 4-(2-methoxyphenyl)-.alpha.,.alpha.-di-3-thienyl-, (2Z)-2-butenedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 67821-80-1
CMF C22 H26 N2 O2 S2



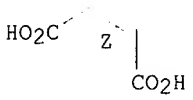
CM 2

CRN 110-16-7

Applied 02

CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



RN 67821-87-8 CAPLUS
CN 1-Piperazinepropanol, 4-(3-methoxyphenyl)-.alpha.,.alpha.-di-3-thienyl-, (2Z)-2-butenedioate (salt) (9CI) (CA INDEX NAME)

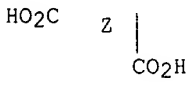
CM 1

CRN 67821-86-7
CMF C22 H26 N2 O2 S2

CM 2

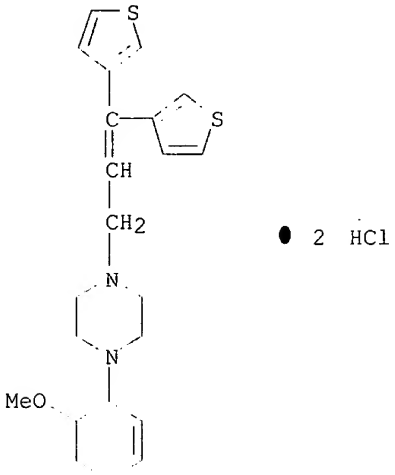
CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.



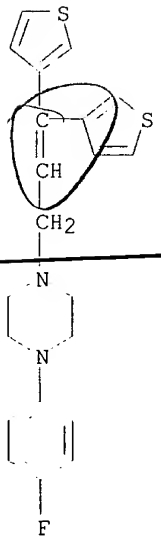
RN 67822-00-8 CAPLUS

CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(2-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



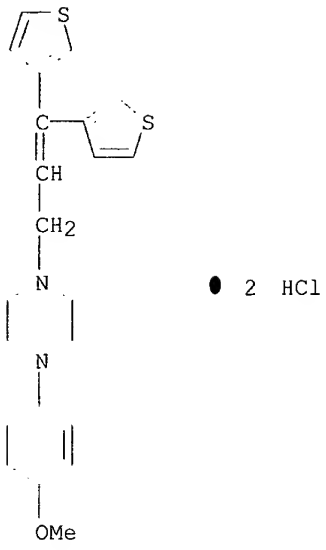
• 2 HCl

RN 67822-01-9 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(4-fluorophenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



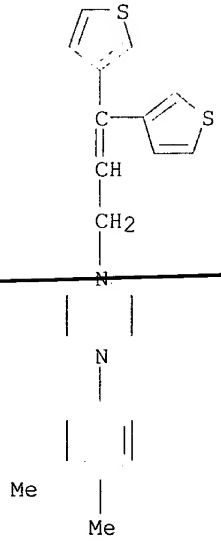
• 2 HCl

RN 67822-02-0 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(4-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



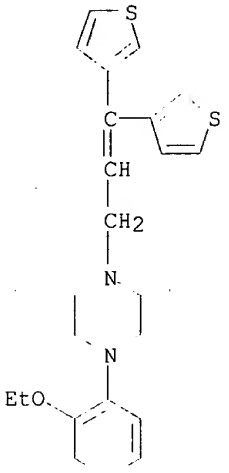
• 2 HCl

RN 67822-03-1 CAPLUS
CN Piperazine, 1-(3,4-dimethylphenyl)-4-(3,3-di-3-thienyl-2-propenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



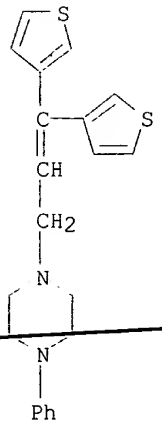
• 2 HCl

RN 67822-06-4 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(2-ethoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



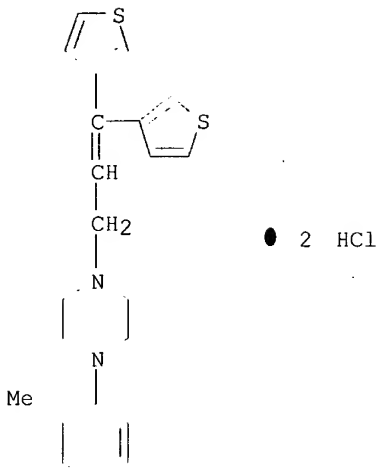
● 2 HCl

RN 67822-07-5 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 67822-08-6 CAPLUS
CN Piperazine, 1-(3,3-di-3-thienyl-2-propenyl)-4-(2-methylphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)

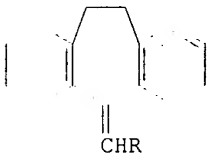


• 2 HCl

=> d bib abs hitstr 18

L13 ANSWER 18 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1977:170993 CAPLUS
DN 86:170993
TI Agents acting on the central nervous system: Part XXVI. Synthesis of some diphenylpropylamine and dibenzocycloheptenylethylamine derivatives
AU Plilai, K. M. R.; Prasad, C. R.; Kapil, R. S.
CS Cent. Drug Res. Inst., Lucknow, India
SO Indian J. Chem., Sect. B (1976), 14B(9), 714-16
CODEN: IJSBDB
DT Journal
LA English
GI

Applied

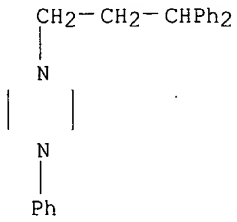


I, R=$CH_2NR^1R^2$
II, R=CHO
III, R=CH_2Br

AB Ph2CHCH2CH2NRR1 or the dibenzocycloheptenes I [R1 = H, R2 = CH2CH2NMe2, cyclopentyl, indol-2-ylethyl, (2-aminoethyl)cyclopentyl, or NR1R2 = 1,2,3,4-tetrahydro-1-quinolyl, 4-phenyl-1-piperazinyl] were prepd. by condensation of Ph2C:CHCHO, Ph2C:CHCH2Br, or the dibenzocycloheptenes II or III with the appropriate amines. None of the compds. had significant activities on the cardiovascular or central nervous system.

IT **62469-23-2P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and pharmacol. activities of)

RN 62469-23-2 CAPLUS
CN Piperazine, 1-(3,3-diphenylpropyl)-4-phenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

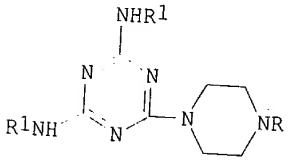
1026

=> d bib abs hitstr 19

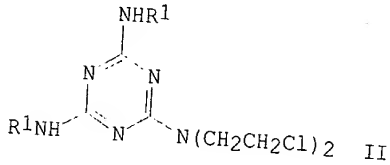
L13 ANSWER 19 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1976:463094 CAPLUS
DN 85:63094
TI s-Triazines
PA Science Union et Cie.-Societe Francaise de Recherche Medicale, Fr.
SO Japan. Kokai, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 49076887	A2	19740724	JP 72-119721	19721129

GI



I

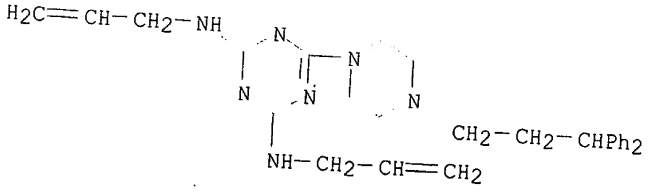


II

AB The triazines I (R = CH2Ph, halogen, OMe, substituted benzyl or benzhydryl; R1 = CH2CH:CR2R3, R2,R3 = H, halogen, Me; R1 = CH2C.tplbond.CR4, R4 = H,Me) were prep. by condensing the bis(chloroethyl)triazines II with H2NR. Thus, 33 g II (R1 = CH2CH:CH2) was heated 10 hr at 150.degree. with 46 g piperonylamine in diglyme and the product was treated with HCl to give 18 g I (R = piperonyl, R1 = CH2CH:CH2).HCl. Among 17 addnl. I.bul.HCl prepd. were (R = piperonyl throughout): R1 = CH2CH:CMe2, CH2CH:CHMe, CH2C.tplbond.CH, CH2CH:CHCl.

IT **27469-55-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 27469-55-2 CAPLUS
CN 1,3,5-Triazine-2,4-diamine,
6-[4-(3,3-diphenylpropyl)-1-piperazinyl]-N,N'-di-2-propenyl- (9CI) (CA INDEX NAME)

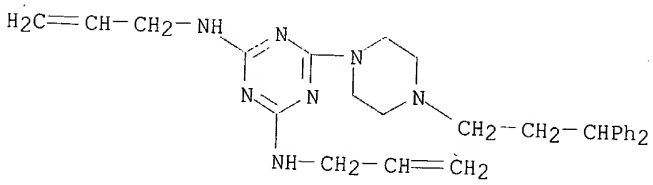


=> d bib abs hitstr 20

L13 ANSWER 20 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1976:421479 CAPLUS
DN 85:21479
TI s-Triazine derivatives
IN Regnier, Gilbert; Canevari, Roger
PA Science Union et Cie.-Societe Francaise de Recherche Medicale, Fr.
SO Can., 13 pp.
CODEN: CAXXA4
DT Patent
LA English
FAN.CNT 1

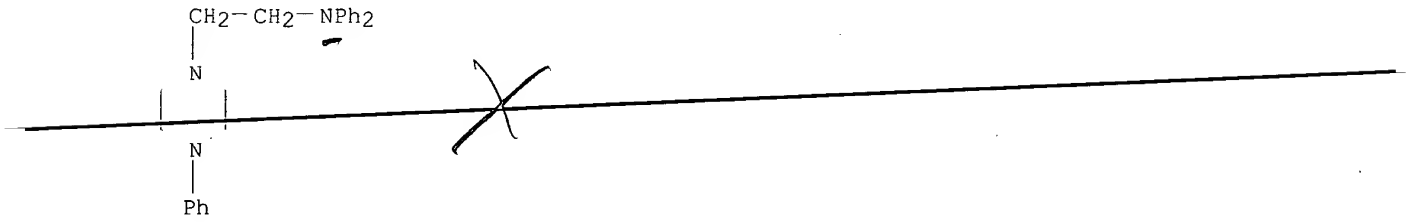
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CA 983497	A1	19760210	CA 72-157707	19721128

GI For diagram(s), see printed CA Issue.
AB Eighteen piperazinyltriazines I (R = H2C:CHCH2, Me2C:CHCH2, HC.tplbond.CCH2, ClCH:CHCH2, MeCH:CHCH2; R1 = 3,4-methylenedioxybenzyl, 3,4-(MeO)2C6H3CH2, 2,3,4-(MeO)3C6H2CH2, Ph2CH, (p-ClC6H4)2CH, etc.) were prepd. by treating II with R1NH2.
IT **27469-55-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 27469-55-2 CAPLUS
CN 1,3,5-Triazine-2,4-diamine, 6-[4-(3,3-diphenylpropyl)-1-piperazinyl]-N,N'-di-2-propenyl- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 21

L13 ANSWER 21 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1974:425292 CAPLUS
DN 81:25292
TI Diphenylaminoalkanamines, alkanamides,and .mu.-amino-N,N-diphenylalkanamides as potential biodynamic agents
AU Ananthanarayanan, C. V.; Rastogi, Shri N.; Srimal, R. C.; Anand, Nitya
CS Cent. Drug Res. Inst., Lucknow, India
SO Indian J. Chem. (1974), 12(1), 31-7
CODEN: IJOCAP
DT Journal
LA English
AB Ph2N(CH2)nR [R = Et2N, Me2CHNH, morpholino, piperidino, etc. throughout; n = 3 (I), 2 (II)], Ph2NCH2CH2COR (III), and Ph2NCO(CH2)nR (IV, n = 1-3) were prepd. starting from N-(.omega.-bromoalkyl)diphenylamines, Ph2NCH2CH2CO2H and .omega.-chloro-N,N-diphenylalkanamides, resp. I could also be prepd. by LAH (LiAlH4) redn. of III, but LAH redn. of IV led to dismutation of the mol. forming Ph2NH and .omega.-aminoalkanols. The compds. synthesized are in general CNS depressants; some of them also show weak anorexic, hypotensive and antiinflammatory activities. A few of them show significant in vitro amoebicidal activity. (Biol. activity data given).
IT **52850-18-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 52850-18-7 CAPLUS
CN 1-Piperazineethanamine, N,N,4-triphenyl- (9CI) (CA INDEX NAME)

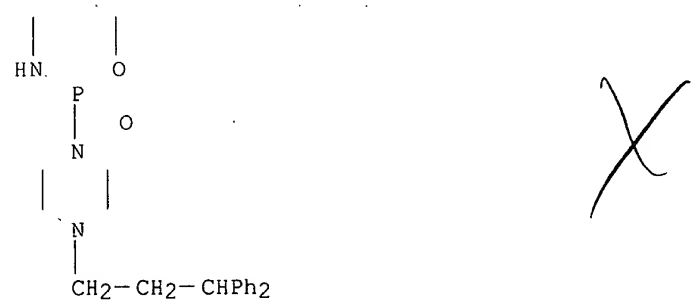


=> d bib abs hitstr 22

L13 ANSWER 22 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1973:136216 CAPLUS
DN 78:136216
TI Synthesis of cyclic phosporamide piperazine derivatives with probable antitumor activity
AU Zikolova, Sv.; Elenska, M.; Sheikova, G.
CS Bulg.
SO Tr. Nauchnoizsled. Khim.-Farm. Inst. (1972), 8, 69-76
CODEN: TKZGAG
DT Journal
LA Bulgarian
AB Piperazines (I; R = R1, Me, PhCH2, Ph2CH, Ph2CHCH2, .alpha.-C10H7CH2, YCH2CH2; Y = Ph, Ph2CH, PhO, PhOCH2, Me2N, Et2N, pyrrolidino, piperidino, morpholino) were treated with 2-chlorotetrahydro-2-oxo-2H-1,3,2-oxazaphosphorin (II) in C2H4Cl2 contg. Et3N at -5 to 0.degree. to give the corresponding oxazaphosphorinylpiperazines (III) in 30-76% yield. III thus prepd. have antitumor activity against Staphylococcus aureus UF-2 and UF-3 comparable to that of Myleran at 1250-2500 .gamma./ml; the antitumor activity of III (R = PhCH2, .alpha.-C10H7CH2) exceeded that of Myleran at 25-125 .gamma./ml.
IT **41379-11-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 41379-11-7 CAPLUS
CN 2H-1,3,2-Oxazaphosphorine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]tetrahydro-, 2-oxide, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

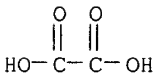
CRN 48218-74-2
CMF C22 H30 N3 O2 P



CM 2

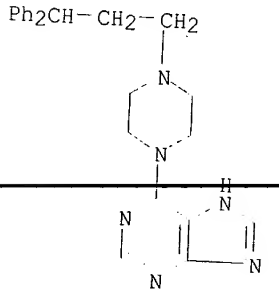
CRN 144-62-7

CMF C2 H2 O4

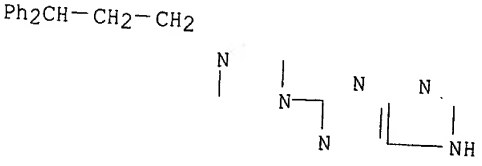


=> d bib abs hitstr 23

L13 ANSWER 23 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1972:539981 CAPLUS
DN 77:139981
TI Central nervous system depressants. New purine derivatives
AU Regnier, G.; Canevari, R.; Le Douarec, J. C.; Laubie, M.
CS Lab. Servier, Sci. Union et Cie, Suresnes, Fr.
SO Chim. Ther. (1972), 7(3), 192-205
CODEN: CHTPBA
DT Journal
LA French
GI For diagram(s), see printed CA Issue.
AB Piperazinopurines (I, R = aryl, aralkyl, 2-pyridinyl, 2-pyrimidinyl; R1 = H, Me, allyl, CH2CH2OH, CH2CH(OH)CH2OH, piperonyl, o-MeOC6H4) and their 6-piperazinopurine analogs (52 compds.) were prepd. by cyclizing the diaminopyrimidine with HC(OEt)3-Ac2O or HOAc-HCONH2. The 6,9-disubstituted purines were obtained by treating the 6-chloropurine with the piperazine deriv. I (R1 = CH2CH(OH)CH2OH) were obtained by treating I (R = H) with ClCH2CH(OH)CH2OH and NaH. Besides their central nervous system depressant activity the piperazinopurines showed some adrenolytic and antiinflammatory activity.
IT **24926-63-4P 37425-11-9P 37425-12-0P 37425-13-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 24926-63-4 CAPLUS
CN 1H-Purine, 6-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



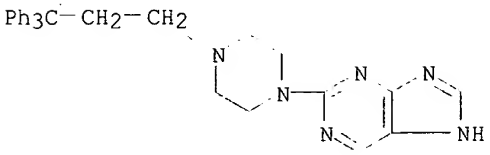
RN 37425-11-9 CAPLUS
CN 1H-Purine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 37425-12-0 CAPLUS
CN 1H-Purine, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

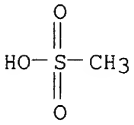
CM 1

CRN 47770-05-8
CMF C30 H30 N6



CM 2

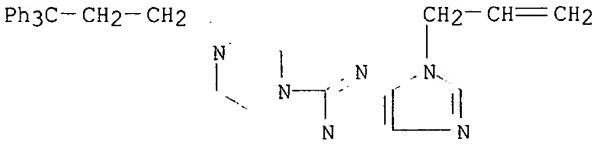
CRN 75-75-2
CMF C H4 O3 S



RN 37425-13-1 CAPLUS
CN 9H-Purine, 9-(2-propenyl)-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

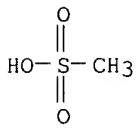
CM 1

CRN 47806-67-7
CMF C33 H34 N6



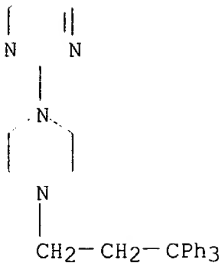
CM 2

CRN 75-75-2
CMF C H4 O3 S

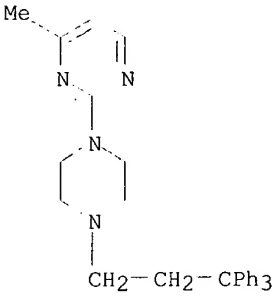


=> d bib abs hitstr 24

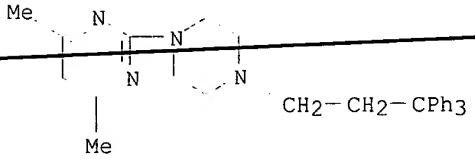
L13 ANSWER 24 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1972:148745 CAPLUS
DN 76:148745
TI Triphenylpropylpiperazine derivatives as new potent analgetic substances
AU Regnier, G. L.; Canevari, R. J.; Le Douarec, J. C.; Holstorp, S.; Daussy, J.
CS Chem. Res. Div., Sci. Union et Cie., Suresnes, Fr.
SO J. Med. Chem. (1972), 15 295-301
CODEN: JMCMAR
DT Journal
LA English
AB Sixty-four 1-triphenylpropyl 4-heterocyclic substituted piperazines (I) with a methadone-like structure were prepd., e.g., by condensation of haloheterocycles or 2-methylthiopyrimidine with N-monosubstituted piperazines or the Cl atom of a 1-substituted 4-(chloropyridazinyl or s-triazinyl)piperazine was hydrogenolyzed under pressure over Pd/C. Structure I was divided into 4 portions and each one varied selectively. To explain complicated structure-analgesic activity relations 1-(3,3,3-triphenylpropyl)-4-(2-pyrimidyl)piperazine (II) [**20980-06-7**], having analgetic potency between that of morphine and codeine, was used to illustrate how modifications in its 4 main parts (see I) influence analgesic activity (mice hot plate test and phenylquinone writhing test). The presence of only 2 Ph groups in part A of II abolished analgesic properties. In part B, the introduction of an addnl. CH2 decreased activity. In part C, any modification of the piperzine ring was unfavorable. In part D the kind of heterocyclic nucleus closely detd. activity, the order of activity being pyrazinyl > pyrimidyl > pyridyl > pyridazinyl > triazinyl. 1-(3,3,3-Triphenylpropyl)-4-(2-pyrazinyl)piperazine (III) [**34675-79-1**] was the most active in the series but induced bizarre behavioral effects after cessation of a 3-week treatment. 1-(3,3,3-Triphenylpropyl)-4-(4-allylamino-2-pyrimidyl)piperazine (IV) [**20980-18-1**] antagonized the actions of II and III while increasing the morphine effect. 1-(3,3,3-Triphenylpropyl)-4-(3-pyridazinyl)piperazine (V) [**34675-81-5**] was pharmacol. similar to codeine [76-57-3].
IT **20980-06-7 20980-11-4 20980-12-5**
20980-13-6 20980-14-7 20980-16-9
20980-17-0 20980-18-1 21026-25-5
21162-92-5 21801-31-0 34675-79-1
34675-81-5 36371-39-8 36371-40-1
36371-41-2 36371-43-4 36371-45-6
36371-60-5 36371-61-6 36524-61-5
36524-62-6 36524-71-7 36524-72-8
36524-74-0 36524-75-1 36524-78-4
36524-80-8 36524-82-0 36524-83-1
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analgesic activity of)
RN 20980-06-7 CAPLUS
CN Pyrimidine, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



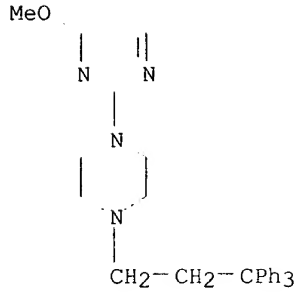
RN 20980-11-4 CAPLUS
CN Pyrimidine, 4-methyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



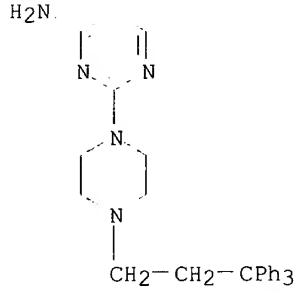
RN 20980-12-5 CAPLUS
CN Pyrimidine, 4,6-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



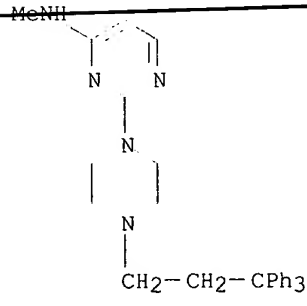
RN 20980-13-6 CAPLUS
CN Pyrimidine, 4-methoxy-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



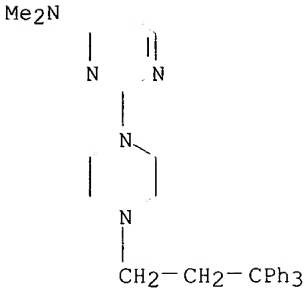
RN 20980-14-7 CAPLUS
CN 4-Pyrimidinamine, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



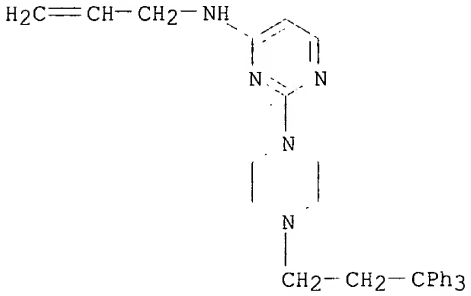
RN 20980-16-9 CAPLUS
CN 4-Pyrimidinamine, N-methyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 20980-17-0 CAPLUS
CN 4-Pyrimidinamine, N,N-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



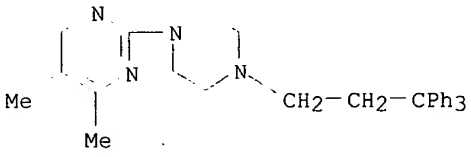
RN 20980-18-1 CAPLUS
CN 4-Pyrimidinamine,
N-2-propenyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-
(9CI) (CA INDEX NAME)



RN 21026-25-5 CAPLUS
CN Pyrimidine, 4,5-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-,
(2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

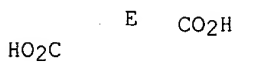
CRN 47758-61-2
CMF C31 H34 N4



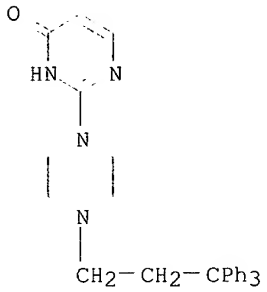
CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.

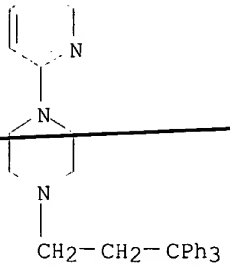


RN 21162-92-5 CAPLUS
CN 4(1H)-Pyrimidinone, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

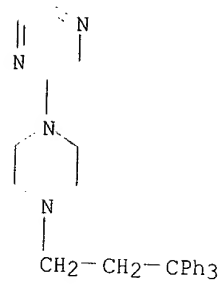


● 2 HCl

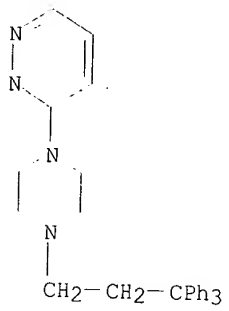
RN 21801-31-0 CAPLUS
CN Piperazine, 1-(2-pyridinyl)-4-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)



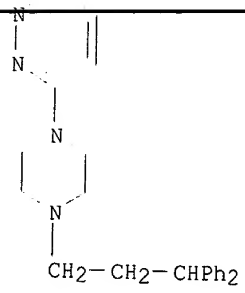
RN 34675-79-1 CAPLUS
CN Pyrazine, [4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 34675-81-5 CAPLUS
CN Pyridazine, 3-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

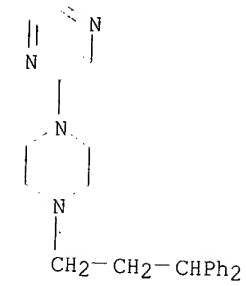


RN 36371-39-8 CAPLUS
CN Pyridazine, 3-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



exclude

RN 36371-40-1 CAPLUS
CN Pyrazine, [4-(3,3-diphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

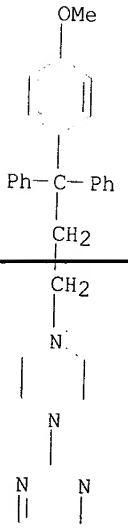


• 2 HCl

RN 36371-41-2 CAPLUS
CN Pyrimidine,
2-[4-[3-(4-methoxyphenyl)-3,3-diphenylpropyl]-1-piperazinyl]-,
dimethanesulfonate (9CI) (CA INDEX NAME)

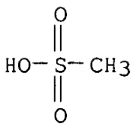
CM 1

CRN 47758-59-8
CMF C30 H32 N4 O



CM 2

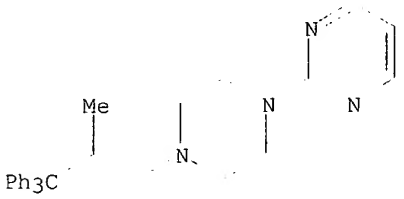
CRN 75-75-2
CMF C H4 O3 S



RN 36371-43-4 CAPLUS
CN Pyrimidine, 2-[4-(2-methyl-3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

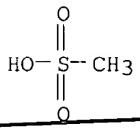
CM 1

CRN 47738-67-0
CMF C30 H32 N4



CM 2

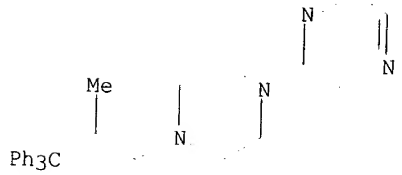
CRN 75-75-2
CMF C H4 O3 S



RN 36371-45-6 CAPLUS
CN Pyrazine, [4-(2-methyl-3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

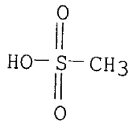
CM 1

CRN 47738-66-9
CMF C30 H32 N4

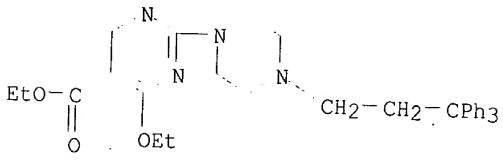


CM 2

CRN 75-75-2
CMF C H4 O3 S

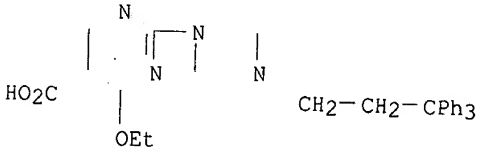


RN 36371-60-5 CAPLUS
CN 5-Pyrimidinecarboxylic acid, 4-ethoxy-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

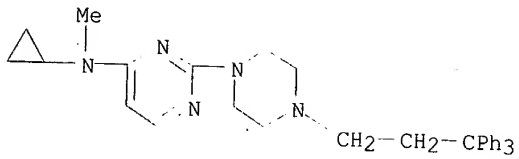


• HCl

RN 36371-61-6 CAPLUS
CN 5-Pyrimidinecarboxylic acid, 4-ethoxy-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

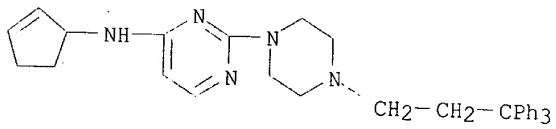


RN 36524-61-5 CAPLUS
CN 4-Pyrimidinamine, N-cyclopropyl-N-methyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

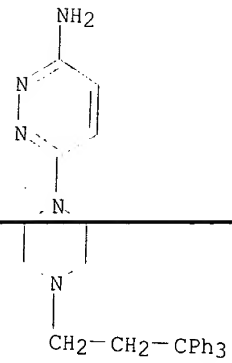


● 2 HCl

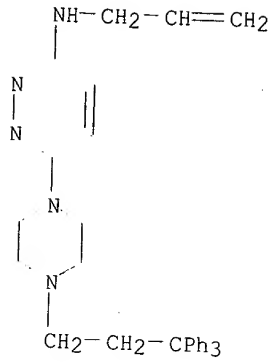
RN 36524-62-6 CAPLUS
CN 4-Pyrimidinamine, N-2-cyclopenten-1-yl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 36524-71-7 CAPLUS
CN 3-Pyridazinamine, 6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

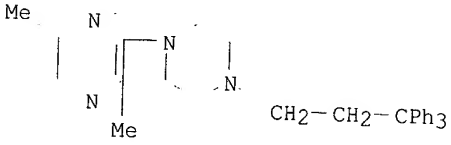


RN 36524-72-8 CAPLUS
CN 3-Pyridazinamine,
N-2-propenyl-6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-
, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 36524-74-0 CAPLUS
CN Pyrazine, 2,5-dimethyl-3-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

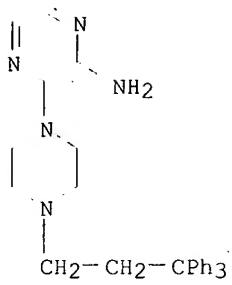


● 2 HCl

RN 36524-75-1 CAPLUS
CN Pyrazinamine, 3-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

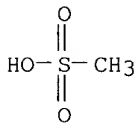
CM 1

CRN 47739-03-7
CMF C29 H31 N5

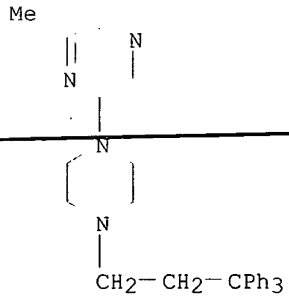


CM 2

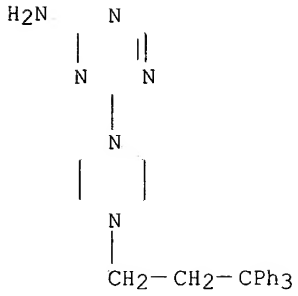
CRN 75-75-2
CMF C H4 O3 S



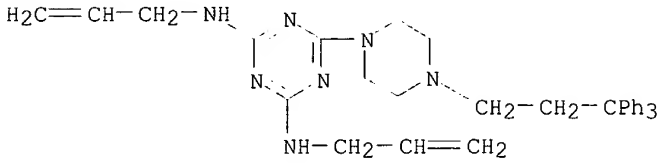
RN 36524-78-4 CAPLUS
CN Pyrazine, 2-methyl-6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA
INDEX NAME)



RN 36524-80-8 CAPLUS
CN 1,3,5-Triazin-2-amine, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI)
(CA INDEX NAME)



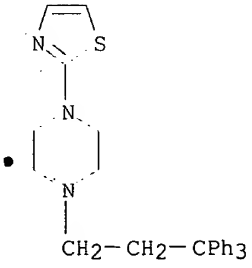
RN 36524-82-0 CAPLUS
CN 1,3,5-Triazine-2,4-diamine, N,N'-di-2-propenyl-6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 36524-83-1 CAPLUS
CN Piperazine, 1-(2-thiazolyl)-4-(3,3,3-triphenylpropyl)-, dimethanesulfonate
(9CI) (CA INDEX NAME)

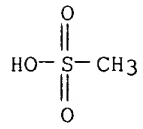
CM 1

CRN 47693-41-4
CMF C28 H29 N3 S

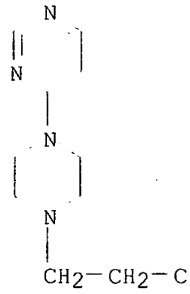


CM 2

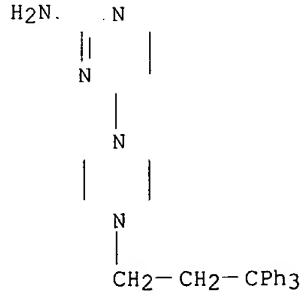
CRN 75-75-2
CMF C H4 O3 S



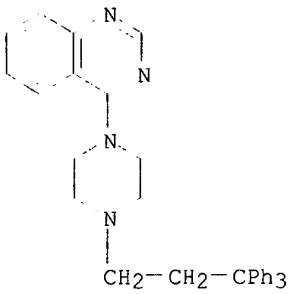
IT **20980-09-0P 20980-15-8P 20980-19-2P**
20980-20-5P 21026-26-6P 21026-27-7P
36371-38-7P 36371-42-3P 36371-47-8P
36371-48-9P 36371-50-3P 36371-51-4P
36371-52-5P 36371-57-0P 36371-62-7P
36371-63-8P 36371-64-9P 36371-65-0P
36478-02-1P 36524-54-6P 36524-55-7P
36524-60-4P 36524-63-7P 36524-64-8P
36524-65-9P 36524-70-6P 36524-73-9P
36524-76-2P 36524-77-3P 36524-79-5P
36524-81-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 20980-09-0 CAPLUS
CN Pyrimidine, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



RN 20980-15-8 CAPLUS
CN 2-Pyrimidinamine, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

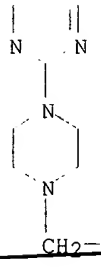


RN 20980-19-2 CAPLUS
CN Quinazoline, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride
(8CI, 9CI) (CA INDEX NAME)



● 2 HCl

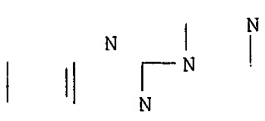
RN 20980-20-5 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



RN 21026-26-6 CAPLUS
CN Quinazoline, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

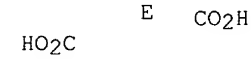
CRN 47787-36-0
CMF C33 H32 N4



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

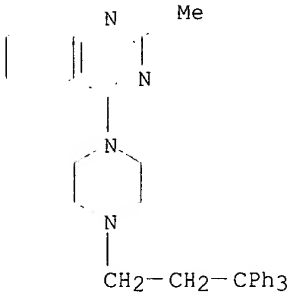
Double bond geometry as shown.



RN 21026-27-7 CAPLUS
CN Quinazoline, 2-methyl-4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

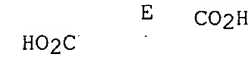
CRN 47796-32-7
CMF C34 H34 N4



CM 2

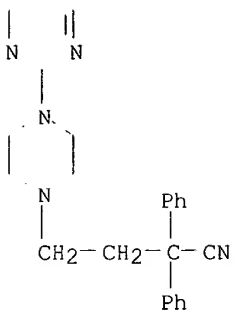
CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.



RN 36371-38-7 CAPLUS
CN 1-Piperazinebutanenitrile, .alpha.,.alpha.-diphenyl-4-(2-pyrimidinyl)- (9CI) (CA INDEX NAME)

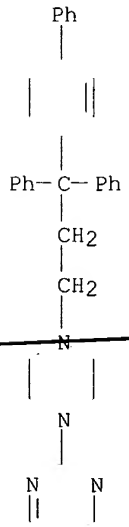
excluded



RN 36371-42-3 CAPLUS
CN Pyrimidine, 2-[4-(3-[1,1'-biphenyl]-4-yl-3,3-diphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

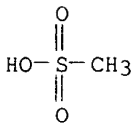
CM 1

CRN 47806-65-5
CMF C35 H34 N4

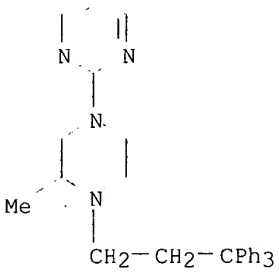


CM 2

CRN 75-75-2
CMF C H4 O3 S

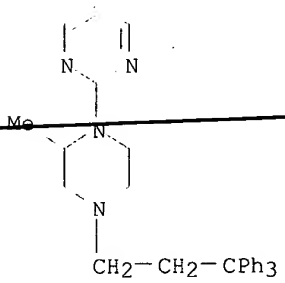


RN 36371-47-8 CAPLUS
CN Pyrimidine, 2-[3-methyl-4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)



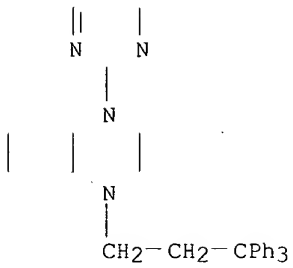
● 2 HCl

RN 36371-48-9 CAPLUS
CN Pyrimidine, 2-[2-methyl-4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

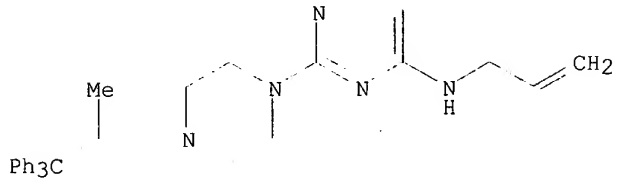


● 2 HCl

RN 36371-50-3 CAPLUS
CN Quinoxaline, decahydro-1-(2-pyrimidinyl)-4-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

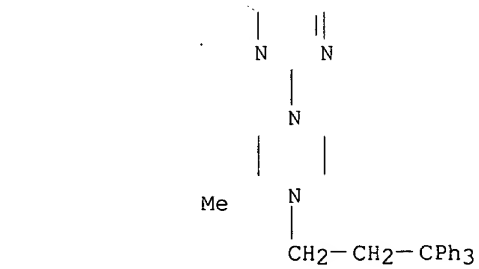


RN 36371-51-4 CAPLUS
CN 4-Pyrimidinamine,
2-[4-(2-methyl-3,3,3-triphenylpropyl)-1-piperazinyl]-N-2-propenyl-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

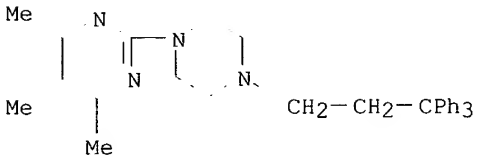
RN 36371-52-5 CAPLUS
CN 4-Pyrimidinamine,
2-[3-methyl-4-(3,3,3-triphenylpropyl)-1-piperazinyl]-N-2-propenyl-, dihydrochloride (9CI) (CA INDEX NAME)



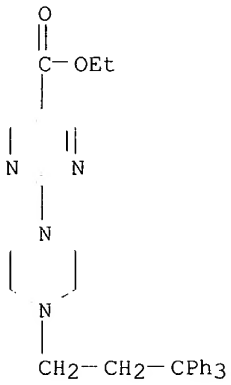
● 2 HCl

RN 36371-57-0 CAPLUS

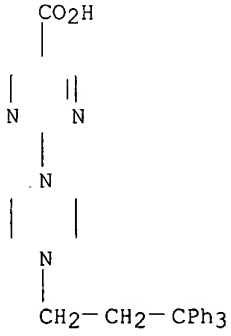
CN Pyrimidine, 4,5,6-trimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



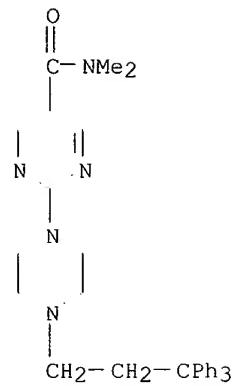
RN 36371-62-7 CAPLUS
CN 5-Pyrimidinecarboxylic acid, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, ethyl ester (9CI) (CA INDEX NAME)



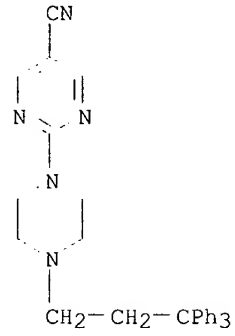
RN 36371-63-8 CAPLUS
CN 5-Pyrimidinecarboxylic acid, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



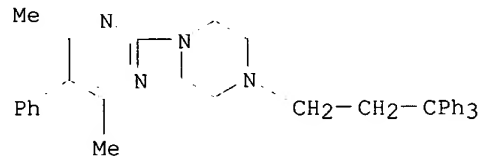
RN 36371-64-9 CAPLUS
CN 5-Pyrimidinecarboxamide, N,N-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



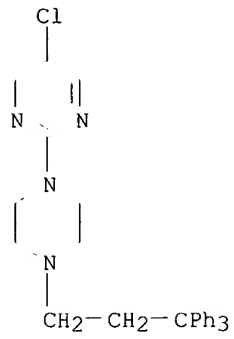
RN 36371-65-0 CAPLUS
CN 5-Pyrimidinecarbonitrile, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



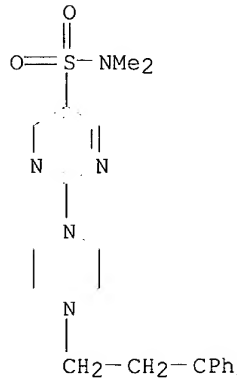
RN 36478-02-1 CAPLUS
CN Pyrimidine, 4,6-dimethyl-5-phenyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



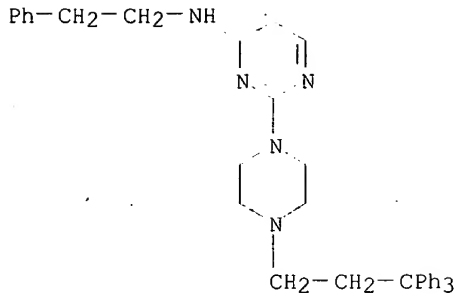
RN 36524-54-6 CAPLUS
CN Pyrimidine, 5-chloro-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 36524-55-7 CAPLUS
CN 5-Pyrimidinesulfonamide, N,N-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

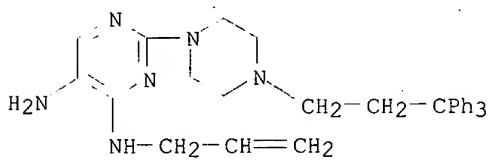


RN 36524-60-4 CAPLUS
CN 4-Pyrimidinamine, N-(2-phenylethyl)-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

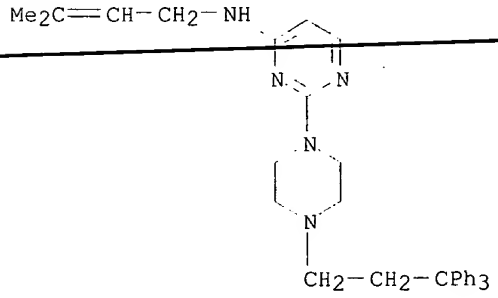


● 2 HCl

RN 36524-63-7 CAPLUS
CN 4,5-Pyrimidinediamine, N4-2-propenyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



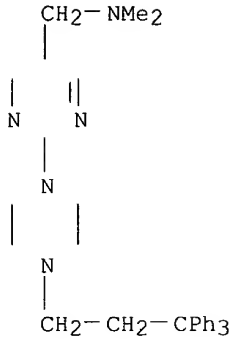
RN 36524-64-8 CAPLUS
CN 4-Pyrimidinamine, N-(3-methyl-2-butenyl)-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 36524-65-9 CAPLUS
CN 5-Pyrimidinemethanamine, N,N-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

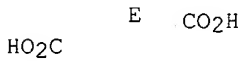
CRN 47787-37-1
CMF C32 H37 N5



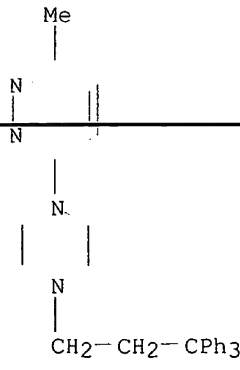
CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

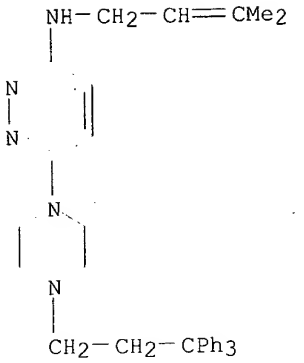
Double bond geometry as shown.



RN 36524-70-6 CAPLUS
CN Pyridazine, 3-methyl-6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



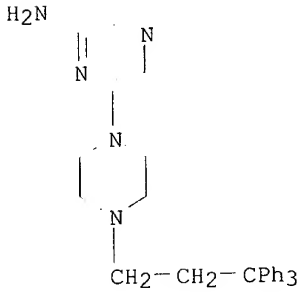
RN 36524-73-9 CAPLUS
CN 3-Pyridazinamine, N-(3-methyl-2-butenyl)-6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 36524-76-2 CAPLUS
CN Pyrazinamine, 6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

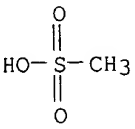
CM 1

CRN 47739-04-8
CMF C29 H31 N5

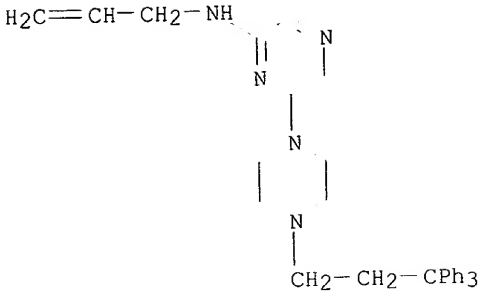


CM 2

CRN 75-75-2
CMF C H4 O3 S

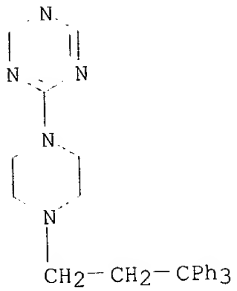


RN 36524-77-3 CAPLUS
CN Pyrazinamine, N-2-propenyl-6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

RN 36524-79-5 CAPLUS
CN 1,3,5-Triazine, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

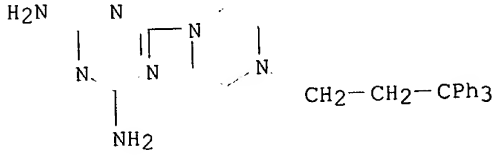


● 2 HCl

RN 36524-81-9 CAPLUS
CN 1,3,5-Triazine-2,4-diamine, 6-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

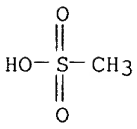
CM 1

CRN 47758-60-1
CMF C28 H31 N7



CM 2

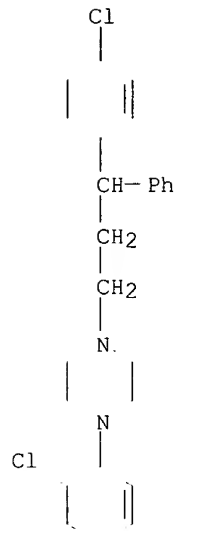
CRN 75-75-2
CMF C H4 O3 S



=>

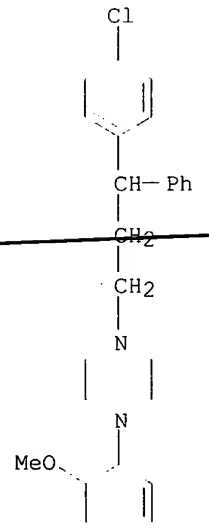
=> d bib abs hitstr 25

L13 ANSWER 25 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1971:431808 CAPLUS
DN 75:31808
TI Antimicrobial activity of piperazine derivatives and related compounds
AU Patel, Madhuben R.; Bellare, Ramesh A.; Deliwala, Chimanlal V.
CS Dep. Chemother., Haffkine Inst., Bombay, India
SO Indian J. Exp. Biol. (1971), 9(1), 117-19
CODEN: IJEBA6
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Basic benzhydryl ethers, thioethers, and ethylenediamine derivs. contg. a piperazine ring (I, R = -NHCH2CH2-, -SCH2CH2-, -OCH2CH2-, -O(CH2)4-, -CH2CO-, or -CH2CH2- and R1 = alkyl, aralkyl, or other aromatic groups) were tested for in vitro activity against gram pos. and gram neg. bacteria, Vibrio comma, Mycobacterium tuberculosis, yeast, and fungi. None of the compds. showed significant activity against Candida albicans, and a very low order of activity was obsd. against Salmonella typhi, Vibrio comma, and Staphylococcus aureus. A majority of the compds. showed activity against M. tuberculosis (64 out of 79 compds. tested) but significant activity was confined to the ethylenediamine series (I, R = -NHCH2CH2-). The most active antituberculosis compds. were N'-[(p-chloro-phenylbezylamino)ethyl]-N-(2-hydroxypropyl)piperazine, N'-[(p-chlorophenylbenzylamino)ethyl]-N-(m-methylbenzyl)piperazine, N'-[(p-chlorophenylbenzylamino)ethyl]-N-(o-methoxyphenyl)piperazine, and N'-[(p-chlorophenylbenzylamino)ethyl]-N-(2-thiazolyl)piperazine, with min. inhibitory concn. of 5 .mu.g/ml.
IT **33656-13-2 33656-14-3 33656-15-4**
33656-16-5 33656-17-6 33656-18-7
33656-19-8 33656-21-2
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(bactericidal activity of)
RN 33656-13-2 CAPLUS
CN Piperazine, 1-(o-chlorophenyl)-4-[3-(p-chlorophenyl)-3-phenylpropyl]- (8CI) (CA INDEX NAME)

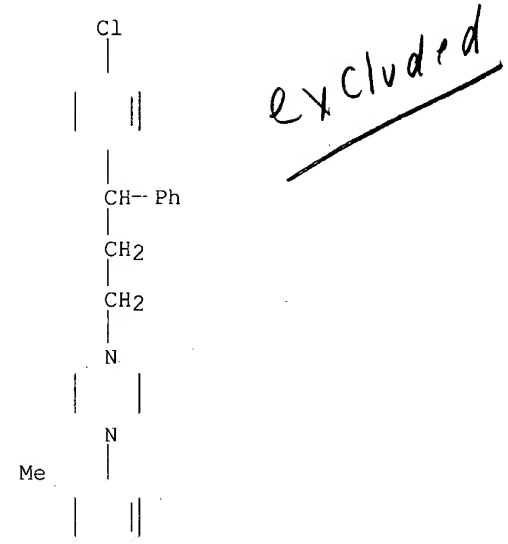


excluded.

RN 33656-14-3 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(o-methoxyphenyl)- (8CI) (CA INDEX NAME)

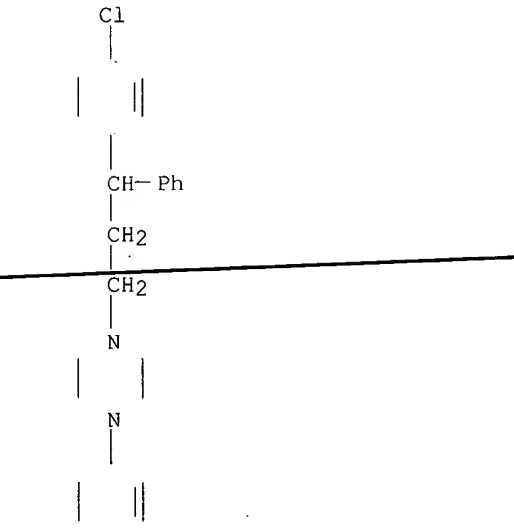


RN 33656-15-4 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-o-tolyl- (8CI) (CA INDEX NAME)



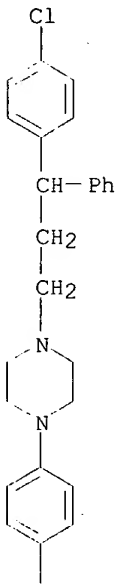
excluded

RN 33656-16-5 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-m-tolyl- (8CI) (CA INDEX NAME)



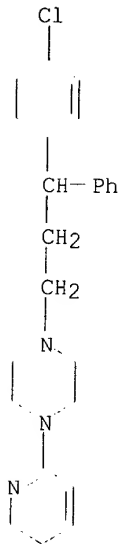
RN 33656-17-6 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-p-tolyl- (8CI) (CA INDEX NAME)

PAGE 1-A

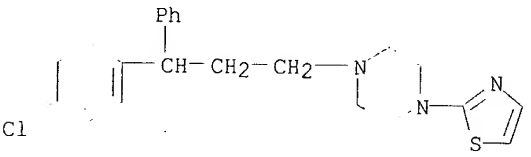


PAGE 2-A

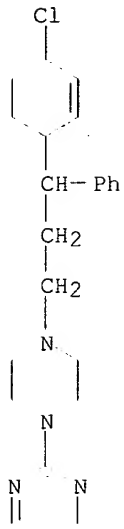
RN 33656-18-7 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(2-pyridyl)- (8CI) (CA INDEX NAME)



RN 33656-19-8 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(2-thiazolyl)- (8CI) (CA INDEX NAME)



RN 33656-21-2 CAPLUS
CN Pyrimidine, 2-[4-[3-(p-chlorophenyl)-3-phenylpropyl]-1-piperazinyl]- (8CI)
(CA INDEX NAME)

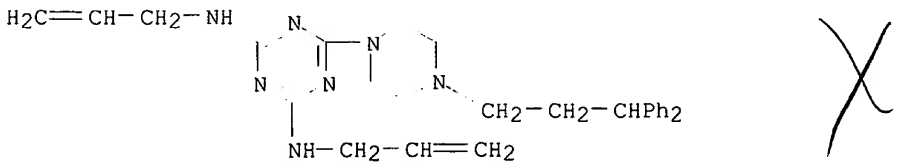

Cl
CH— Ph
CH2
CH2
N
N
N
N

=> d bib abs hitstr 26

L13 ANSWER 26 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1970:520681 CAPLUS
DN 73:120681
TI s-Triazine derivatives, and their analeptic respiratory activity
PA Science Union et Cie.-Societe Francaise de Recherche Medicale
SO Belg., 14 pp.
CODEN: BEXXAL
DT Patent
LA Unavailable
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 739283	A	19700323	BE 69-739283	19690923
	GB 1256513	A	19711208	GB 68-46802	19681002
	AT 291271	B	19710712	AT 69-8674	19690912
	ES 371943	A1	19711116	ES 69-371943	19690926
	CH 517754	A	19720115	CH 69-517754	19690926
	US 3647794	A	19720307	US 69-861448	19690926
	SE 350498	B	19721030	SE 69-13373	19690929
	NL 6914749	A	19700406	NL 69-14749	19690930
	NO 124996	B	19720703	NO 69-3917	19691001
	BR 6912898	A0	19730524	BR 69-212898	19691001
	DK 129656	B	19741104	DK 69-5228	19691001
	FI 49512	B	19750401	FI 69-2827	19691001

PRAI GB 68-46802 19681002
GI For diagram(s), see printed CA Issue.
AB The title compds. (I), with low toxicity and with analeptic effect on respiration, were prepd. Thus, DMF contg. 4,6-bis(allylamino)-2-chloro-s-triazine and 1-piperonylpiperazine was refluxed 9 hr and treated with iso-PrOH satd. with dry HCl to give 52.3% I(R = allyl, R1 = piperonyl).-2HCl. Similarly were prepd. 23 related compds. either as free bases or salts.
IT **27469-55-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 27469-55-2 CAPLUS
CN 1,3,5-Triazine-2,4-diamine, 6-[4-(3,3-diphenylpropyl)-1-piperazinyl]-N,N'-di-2-propenyl- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 27

L13 ANSWER 27 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1970:121586 CAPLUS
DN 72:121586
TI 2-Piperazino-4,6-bis(allylamino)-sym-triazines against respiration insufficiency
IN Regnier, Gilbert; Canevari, Roger; Laubie, Michel
PA Science Union et Cie.-Societe Francaise de Recherche Medicale
SO Ger. Offen., 16 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1947332	A	19700409	DE 69-1947332	19690918
	DE 1947332	C3	19730412		
	GB 1256513	A	19711208	GB 68-46802	19681002
	AT 291271	B	19710712	AT 69-8674	19690912
	ES 371943	A1	19711116	ES 69-371943	19690926
	CH 517754	A	19720115	CH 69-517754	19690926
	US 3647794	A	19720307	US 69-861448	19690926
	SE 350498	B	19721030	SE 69-13373	19690929
	NL 6914749	A	19700406	NL 69-14749	19690930
	NO 124996	B	19720703	NO 69-3917	19691001
	BR 6912898	A0	19730524	BR 69-212898	19691001
	DK 129656	B	19741104	DK 69-5228	19691001
	FI 49512	B	19750401	FI 69-2827	19691001
PRAI	GB 68-46802		19681002		

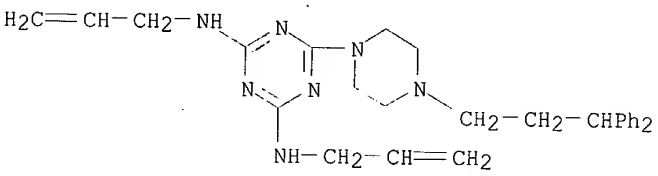
GI For diagram(s), see printed CA Issue.
AB s-Triazines (I), respiratory analeptics, were prepd. from the corresponding 2-chloro derivs. and piperazines. Thus, 0.0443 mole 4,6-bis(allylamino)-2-chloro-s-triazine and 0.0886 mole 1-piperonylpiperazine in 300 ml HCONMe2 was refluxed 9 hr at 150.degree. and acidified to give 52.3% I.2HCl (R = piperonyl, R1 = CH:CH2), m. 228-9.degree.. Similarly prepd. were I (R1 = CH:CH2) (R, salt, and m.p. salt given): 3,4-(ethylenedioxy)-benzyl, fumarate monohydrate, 105-15.degree. (decompn.); 3,4(MeO)2C6H3CH2, fumarate, 105-12.degree.; 2,3,4-(MeO)3C6H2CH2, di hydrochloride monohydrate, 167-73.degree.; 4-FC6H4CH2, dihydrochloride, 220-5.degree.; Ph, dihydrochloride, 220-4.degree.; 2-MeOC6H4, dihydrochloride, 202-21.degree. (decompn.); 3-F3CC6H4, base, 115.degree.; 2-pyridyl, dihydrochloride monohydrate, 212-14.degree.; 2-pyrimidinyl, dihydrochloride hemihydrate, 228-32.degree.; 2-pyrazinyl, dihydrochloride dihydrate, 318-25.degree.; PhCH2CH2, dihydrochloride, 239-47.degree.; PhCH2CHMe, base, 100-3.degree.; PhCH:CHCH2, dihydrochloride 2.5-hydrate, 215-22.degree.; Ph2CH, bis(methanesulfonate), 220-31.degree.; (4-FC6H4)2CH, base, 175-80.degree.; (4-ClC6H4)2-CH, bis(methanesulfonate), 236-40.degree.; Ph2CHCH2CH2, base, 104-8.degree.; H, dihydrochloride, 259-63.degree.. I.2HCl (R = piperonyl, R1 = CH:CMe2), m. 222-7.degree., I (R = piperonyl, R1 = CH:-CHMe) fumarate, m. 155-8.degree., I [R = (4-FC6H4)2CH, R1 = trans-CH:CHCl], m. 124.degree., and I.2HCl (R = piperonyl, R1 = C.tplbond.CH), m. 180-220.degree. (decompn.) were also prepd. I and their salts have low

toxicity; LD50 (mice) 50-400 or 400- >2000 mg/kg when applied i.p. or per os. resp.

IT **27469-55-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 27469-55-2 CAPLUS

CN 1,3,5-Triazine-2,4-diamine, 6-[4-(3,3-diphenylpropyl)-1-piperazinyl]-N,N'-di-2-propenyl- (9CI) (CA INDEX NAME)



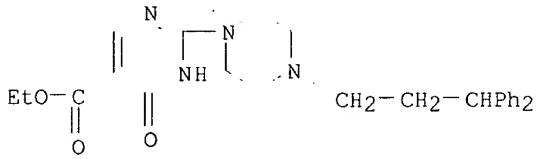
=> d bib abs hitstr 28

L13 ANSWER 28 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1970:55401 CAPLUS'
DN 72:55401
TI Syntheses of N-heterocyclic compounds. I. Syntheses of 2,4,5-trisubstituted pyrimidine derivatives
AU Yurugi, Shojiro; Tomimoto, Mitsumi; Fushimi, Tomiyoshi
CS Takeda Chem. Ind. Ltd., Osaka, Japan
SO Takeda Kenkyusho Nempo (1969), 28, 1-11
CODEN: TDKNAF
DT Journal
LA Japanese
GI For diagram(s), see printed CA Issue.
AB I were prepd. by the condensation reaction of R1C(:NH)NH2 with EtOCH:C(CO2Et)2 or by the replacement reaction of 2-(methylthio)-4-hydroxy-5-(ethoxycarbonyl)pyrimidine with amines. I were treated with amines to give II. III, obtained from 2-(methylthio)-4-chloro-5-(ethoxycarbonyl)pyrimidine (IV), were treated with 1-benzylpiperidine to give V. Reaction of IV with HN(CH2CH2OH)2 gave 96.8% VI, m. 145.degree.. The following I were prepd. (R1, % yield, and m.p. given): morpholino, 55.3, 163-4.degree.; pyrrolidinyl, 43.5, 192-3.degree.; piperidyl, 23.9, 142-3.degree.; 1-benzy lpiperazinyl, 35.8, 147-8.degree.; 1-(2-hydroxyethyl)piperazinyl, 63.3, 130.degree. (decompn.); 1-(2,3,4-trimethoxybenzyl)piperazinyl, 87.8, 105-7.degree.; 1-(3,4-dimethoxybenzyl)piperazinyl, 68.2, 147-50.degree.; 1-(diphenylmethyl)piperazinyl, 89, 236.degree.; 1-(3,3-diphenylpropyl)piperazinyl, 80.0, 133-5.degree.; 1-(2-phenethyl)piperazinyl, 90.0, 185-6.degree.; 1-(3,4-methylene-dioxybenzyl)piperazinyl, 89.0, 153-4.degree.; 2-piperidylethylamino, 47.7, 146.degree. (di-HCl salt, m. 220-3.degree.); and 2-hydroxyphenethyl-amino, 26.4, 242-3.degree.. The II prepd. were as follows (R2, R3, % yield, and m.p. given): C5H11NH, NHNH2, 53.0, 218-20.degree.; iso-C5H11NH, NHNH2, 53.0, 214-15.degree.; PhCH2NH, NHNH2, 55.0, 229-30.degree. (decompn.); morpholino, morpholino, 30.6, 233-5.degree.; morpholino, NHNH2, 70.0, 265.degree.; morpholino, NHPr-iso, 76.0, 220-1.degree.; morpholino, 1-benzylpiperazinyl, 43.9, 120.degree. (decompn.); 1-benzylpiperazinyl, NHNH2, 35.7, 213-15.degree.; Ph-CH2NH, 1-benzylpiperazinyl, 67.8, 125-30.degree.; PhCH2NH, NH-Pr-iso, 58.0, 247-8.degree.; PhCH2NH, morpholino, 62.5, 192-4.degree.; 1-(2-hydroxyethyl)piperazinyl, NHPr-iso, 49.0, 204-5.degree.; 1-(2-hydroxyethyl)piperazinyl, 1-(2-hydroxyethyl)piperazinyl, 10.0, 75.degree. (decompn.); 1-(2-hydroxyethyl)piperazinyl, 1-benzylpiperazinyl , 53.3, 147-50.degree. (decompn.); 1-(2,3,4-trimethoxybenzyl)piperazinyl, morpholino, 54.8, 196-7.degree.; 1-benzylpiperazinyl, NH2, 51.0, 195-6.degree.; 1-(phenethyl)piperazinyl, morpholino, 86.8, 234.degree. (decompn.); 1-(3,4-dimethoxybenzyl)piperazinyl, morpholino, 100, 229.degree. (decompn.); 1-(3,3-diphenylpropyl)piperazinyl, morpholino, 71.4, 187.degree.; 1-(3,4-methylenedioxybenzyl)piperazinyl, morpholino, 87.6, 219.degree.; 1-(2,3,4-trimethoxybenzyl)-piperazinyl, NHPr-iso, 43.5, 177.degree.; 2-hydroxyphenethylamino, morpholino, 44.6, 178-9.degree. (decompn.); 2-hydroxyphenethyl-amino, 1-benzylpiperazinyl, 28.0, 170-2.degree.; and NHNH2, NHNH2, 70, 275.degree.. The III prepd. were as follows (R4, % yield, and m.p. given): NHPr-iso, 98.0, 50.degree.;

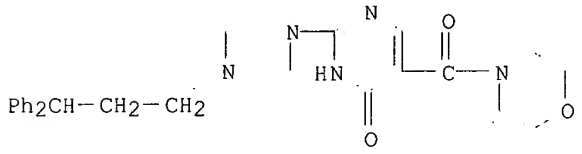
1-benzylpiperazinyl, 50.0, 178.degree. (decompn.); and NH(CH2)2NEt2, 50.0,
178.degree. (decompn.). The V prepd. were as follows (R5, % yield, and m.p. given): NH2, 67.0, 130.degree.; NHCHMe2, 72.0, 211.degree. (decompn.); NHCH2-Ph, 60, 208.degree. (decompn.); 1-benzylpiperazinyl, 61.5, 230.degree. (decompn.); and NH(CH2)2NEt2, 45.0, 220.degree. (decompn.). The NMR spectrum of VI is presented.

IT **25693-49-6P 25693-74-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 25693-49-6 CAPLUS
CN 5-Pyrimidinecarboxylic acid, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4-hydroxy-, ethyl ester (8CI) (CA INDEX NAME)



RN 25693-74-7 CAPLUS
CN Morpholine, 4-[[2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4-hydroxy-5-pyrimidinyl]carbonyl]- (8CI) (CA INDEX NAME)



=> d bib abs hitstr 29

L13 ANSWER 29 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1970:31840 CAPLUS
DN 72:31840
TI Analgesic and hypotensive 2-and 6-(4-substituted-1-pyperazinyl) purines
IN Regnier, Gilbert; Canevari, Roger; Le Douarec, Jean C.; Laubie, Michel
PA Science Union et Cie. - Societe Francaise de Recherche Medicale
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3457263	A	19690722	US 67-694357	19671229
	GB 1165283	A	19690924	GB 67-2446	19670117
	BE 709014	A	19680705	BE 68-709014	19680105
	CH 490404	A	19700515	CH 68-490404	19680112
	FR 1550912	A	19681220	FR 68-1550912	19680115
	ES 349429	A1	19690401	ES 68-349429	19680117
	FR 7559	M	19691229	FR 68-7559	19680329
PRAI	GB 67-2446		19670117		

GI For diagram(s), see printed CA Issue.
AB To prep. title purines (I) chloro-substituted 4-amino-5-nitropyrimidines (II) were treated with N-monosubstituted piperazines (III) in a polar solvent, e.g. DMF (dimethylformamide) at 110-140.degree. 14 hr in the presence of an acid acceptor, e.g. Na2CO3. The resulting IV is hydrogenated at room temp. under 2-10 atm in the presence of a catalyst, e.g. Raney Ni. The resulting diamino compd. (V) is then cyclized to give I e.g. by heating it in an excess of ethyl orthoformate in the presence of

Ac2O 6 hr at 110-30.degree.. Prepd. were 2-[4-(diphenylmethyl)-1-piperazinyl]-purine, m. 210-12.degree. (decompn.), bismethanesulfonate deriv. m. 229-311.degree.; 2-(4-cinnamylpiperazin-1-yl)purine, m. 260.degree.; 6-[4-(diphenylmethyl)-1-piperazinyl]purine, m. 275-6.degree., bismethanesulfonate deriv., m. 230.degree.. Other I prepd. were (R, R1, point of connection to the ring, and m.p. are given): piperonyl, H, 2, (di-HCl salt m. 195-6.degree.); o-methoxyphenyl, H, 2, 239-40.degree. (di-HCl salt 162-4.degree.); 3,3-diphenylpropyl, H, 2, 88-91.degree.; 2-pyrimidinyl, H, 2, 282-4.degree.; 2-pyrimidinyl, Me, 2, 195-8.degree.; diphenylmethyl, Me, 2, 193-5.degree.; piperonyl, H, 6, 257.degree.; cinnamyl, H, 6, 224.degree.; phenylisopropyl, H, 6, 215-17.degree.; o-methoxyphenoxyethyl, H, 6, 209.degree.; 2-phenylethyl, H, 6, 243.degree.; 3,3-diphenylpropyl, H, 6, 200.degree.; piperonyl, Me, 2, [bis(methanesulfonate) m. 236-40.degree.]; diphenylmethyl, HOCH2CH2, 2, 174.degree.; phenylisopropyl, H, 2, (di-HCl salt m. 261-7.degree.); 2-phenyleth yl, H, 2, (di-HCl salt m. 258-63.degree.); o-methoxyphenoxyethyl, H, 2, [(bismethanesulfonate) m. 208-17.degree.]; piperonyl, HOCH2CH2, 2, (di-HCl m. 235-40.degree.; piperonyl, allyl, 2, (di-HCl salt m. 204-12.degree.); diphenylmethyl, allyl, 2, (di-HCl salt m. 257-59.degree.; diphenylmethyl, piperonyl, [2-(bismethane sulfonate) m. 140-44.degree.]; piperonyl, piperonyl, 2, (di-HCl salt 237-42.degree.); piperonyl, 2,-3-dihydroxypropyl, 2, 215-22.degree. (decompn.); 2-pyrimidinyl, H, 6, >350.degree.; o-methoxyphenyl, H, 6, [bis(methane sulfonate) m. 200-203.degree.]; piperonyl, HOCH2CH2, 6, -

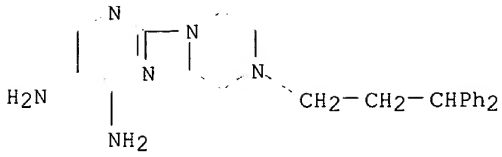
(di-HCl salt m. 270.degree.); piperonyl, piperonyl, 6, (di-HCl salt m. 139-49.degree.); piperonyl, Me, 6, [bis(methanesulfonate) m. 197-200.degree.]; diphenylmethyl, piperonyl, 6, 154.degree.; diphenylmethyl, HOCH2CH2, 6, (di-HCl salt m. 213-17.degree.); cinnamyl, piperonyl, 6, 136.degree.; diphenylmethyl, 2,3-dihydroxypropyl, 6, 230-34.degree.; m-(trifluoromethyl)phenyl, H, 6, 280-87.degree.; 2-pyridinyl, H, 6, 300-305.degree.. IV prepd. were (R, R1, position of substitution, and m.p. given): piperonyl, H, 2, 157-8.degree.; o-methoxyphenyl, H, 2, 176.degree.; 3,3-diphenylpropyl, H, 2, 130.degree.; 2-pyrimidinyl, H, 2, 180-81.degree.; 2-pyrimidinyl, Me, 2, 231.degree.; diphenylmethyl, Me, 2, 197.degree.; diphenylmethyl, H, 2, 183.degree.; piperonyl, H, 4, 162.degree.; cinnamyl, H, 4, 155.degree.; phenylisopropyl, H, 4, 168.degree.; o-methoxyphenoxyethyl, H, 4, 110-12.degree.; phenylethyl, H, 4, 180.degree.; 3,3-diphenylpropyl, H, 4, 158.degree.; piperonyl, Me, 2, 150.degree.; diphenylmethyl, HOCH2CH2, 2, 163.degree.; cinnamyl, H, 2, 160.degree.; phenylisopropyl, H, 2, 190.degree.; phenylethyl, H, 2, 180.degree.; o-methoxyphenoxyethyl, H, 2, 120.degree.; piperonyl, HOCH2CH2, 2, 109.degree.; diphenylmethyl, allyl, 2, 134.degree.; diphenylmethyl, piperonyl, 2, 173.degree.; piperonyl, piperonyl, 2, 110.degree. (decompn.); piperonyl, 2,3-dihydroxypropyl, 2, (di-HCl salt m. 210-19.degree.). V prepd. were (R, R1, position of substitution, and m.p. given): diphenylmethyl, H, 2, 222.degree.; piperonyl, H, 2, 184.degree.; o-methoxyphenyl, H, 2, (tri-HCl salt m. 163-5.degree.); 3,3-diphenylpropyl, H, 2, [di-HCl salt m. 175-8.degree. (decompn.)]; 2-pyrimidinyl, H, 2, 175.degree.; 2-pyrimidinyl, Me , 2, 231.degree.; diphenylmethyl, Me, 2, 256.degree.; piperonyl, H, 4, 162.degree.; cinnamyl, H, 4, 149.degree.; phenylisopropyl, H, 4, 166.degree.; o-methoxyphenoxyethyl, H, 4, 180.degree.; phenylethyl, H, 4, 202.degree.; 3,3-diphenylpropyl, H, 4, 170.degree.; piperonyl, Me, 2, 140.degree.; diphenylmethyl, HOCH2CH2, 2, 176.degree.; cinnamyl, H, 2, (di-HCl salt m. 254-60.degree.); phenylisopropyl, H, 2, 112.degree.; phenylethyl, H, 2, 124-7.degree. [tri-HCl salt m. 190.degree. (decompn.)]; o-methoxyphenoxyethyl, H, 2, 106-110.degree. (tri-HCl salt m. 218-223.degree.); piperonyl, HOCH2CH2, 2, 94.degree. [tri-HCl salt m. 200.degree. (decompn.)]; piperonyl, allyl, 2, (an oil); diphenylmethyl, allyl, 2, 169.degree.; diphenylmethyl, piperonyl, 2, (an oil); piperonyl, piperonyl, 2, (an oil); piperonyl, 2,3-dihydroxypropyl, 2, [tri-HCl salt m. 200.degree. (decompn.)]. Other compds. prepd. were 6-chloro-9-(hydroxyethyl)purine m. 160.degree., 6-chloro-9-piperonylpurine m. 164.degree., and 6-chloro-9-methylpurine m. 140.degree.; and these were used in the prepn. of I. Toxicol. and pharmacol. studies have shown that they have a low toxicity and therapeutic properties as antihypertensive, analgesic, and central nervous system depressants. The LD50 studied by i.p. administration in mice varies from 88-600 mg/kg and from 360 to over 2000 mg/kg for peroral administration.

IT **24926-38-3P 24926-39-4P 24926-40-7P**
24926-63-4P 24926-64-5P 24926-65-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 24926-38-3 CAPLUS

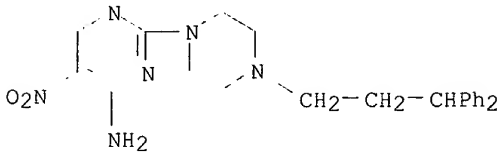
RN 24926-39-4 CAPLUS

CN Pyrimidine, 4,5-diamino-2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, dihydrochloride (8CI) (CA INDEX NAME)



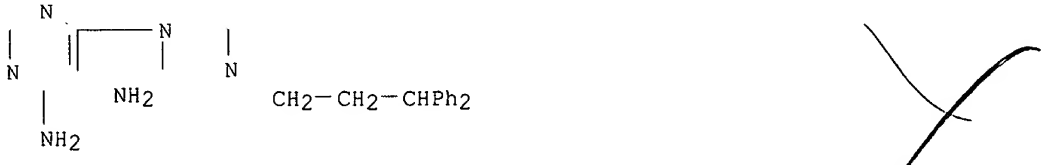
• 2 HCl

RN 24926-40-7 CAPLUS
CN Pyrimidine, 4-amino-2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-5-nitro- (8CI) (CA INDEX NAME)

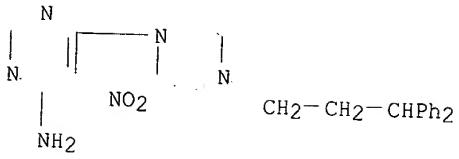


RN 24926-63-4 CAPLUS
CN 1H-Purine, 6-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 24926-64-5 CAPLUS
CN Pyrimidine, 4,5-diamino-6-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (8CI) (CA INDEX NAME)



RN 24926-65-6 CAPLUS
CN Pyrimidine, 4-amino-6-[4-(3,3-diphenylpropyl)-1-piperazinyl]-5-nitro- (8CI) (CA INDEX NAME)


N
N
N
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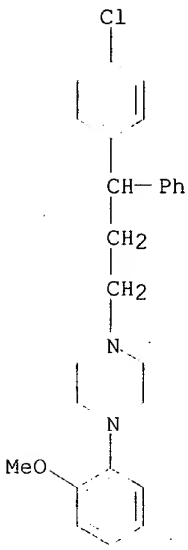
NO2
NH2
CH2—CH2—CHPh2

=> d bib abs hitstr 30

L13 ANSWER 30 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1969:501817 CAPLUS
DN 71:101817
TI Synthesis and central nervous system depressant activity of new piperazine
derivatives and related compounds. II
AU Vadodaria, D. J.; Deliwala, Chimanlal V.; Mandrekar, S. S.; Sheth, U. K.
CS Haffkine Inst., Bombay, India
SO J. Med. Chem. (1969), 12, 860-5
CODEN: JMCMAR
DT Journal
LA English
AB Ninety-three N1,N4-disubstituted piperazine derivatives in which the N1-substituents are 3-(p-chlorophenyl)-3-phenylpropionyl, 3-(p-chlorophenyl)-3-phenylpropyl, .omega.-(p-chloro-.alpha.-phenylbenzyloxy)alkyl, .beta.-(p-chloro-.alpha.-phenylbenzylthio)ethyl, .beta.- (p - chloro-.alpha.-phenylbenzylamino)ethyl, or .beta. - (1,2-diphenylethylamino)ethyl and the N4-substituents are Me, 2-hydroxypropyl, 2-(2-hydroxyethoxy)ethyl, cyclohexyl, benzyl, m-methyl- and p-tert-butylbenzyl, p-chloro-.alpha.-phenylbenzyl, phenethyl, Ph, chloro-, and methoxyphenyl, tolyl, 2-pyridyl, 2-pyrimidinyl, or 2-thiazolyl have been synthesized. So have some N,N'-disubstituted ethylenediamines in which the substituent is p-chloro-.alpha.-phenylbenzyl
and N'-substituents are alkyl groups or N' is a part of morpholine or piperidine. Screening for central nervous system (CNS) activity revealed that some compds. possessed significant CNS depressant activity. A few compds. exhibited promising antihistaminic activity in exptl. animals.
IT **23902-92-3P 23904-73-6P 23940-99-0P**
23941-00-6P 23941-10-8P 23941-11-9P
23941-12-0P 24042-30-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 23902-92-3 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(o-methoxyphenyl)-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 33656-14-3
CMF C26 H29 Cl N2 O

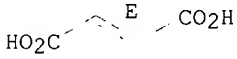


Excluded.

CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.

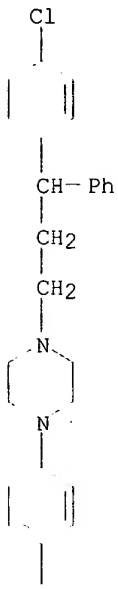


RN 23904-73-6 CAPLUS
CN ~~Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-p-tolyl-~~, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 33656-17-6
CMF C26 H29 Cl N2

PAGE 1-A

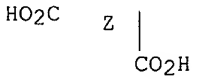


PAGE 2-A

CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

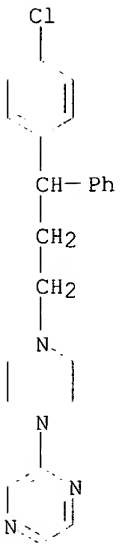
Double bond geometry as shown.



RN 23940-99-0 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(pyrazinyl)-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

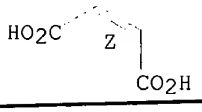
CRN 47581-22-6
CMF C23 H25 Cl N4



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

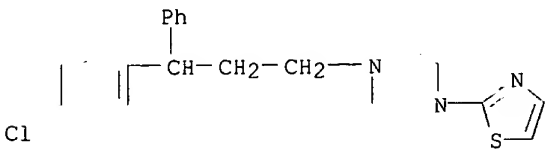
Double bond geometry as shown.



RN 23941-00-6 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(2-thiazolyl)-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

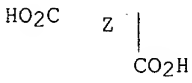
CRN 33656-19-8
CMF C22 H24 Cl N3 S



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

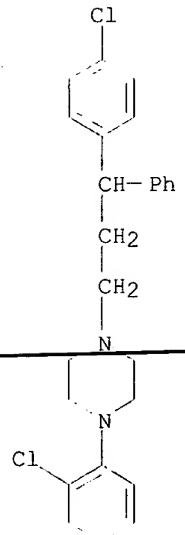
Double bond geometry as shown.



RN 23941-10-8 CAPLUS
CN Piperazine, 1-(o-chlorophenyl)-4-[3-(p-chlorophenyl)-3-phenylpropyl]-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

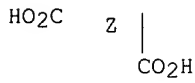
CRN 33656-13-2
CMF C25 H26 Cl2 N2



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

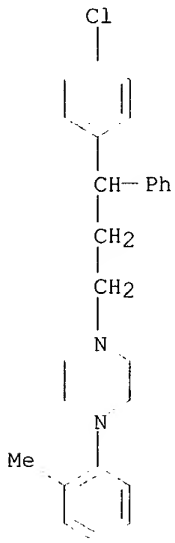
Double bond geometry as shown.



RN 23941-11-9 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-o-tolyl-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

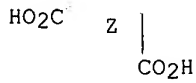
CRN 33656-15-4
CMF C26 H29 Cl N2



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

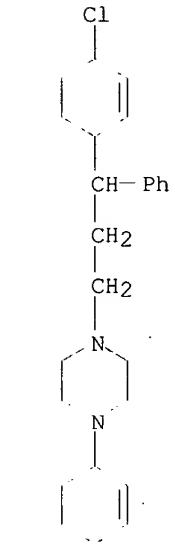
Double bond geometry as shown.



RN 23941-12-0 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-m-tolyl-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

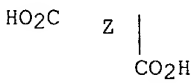
CRN 33656-16-5
CMF C26 H29 Cl N2



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

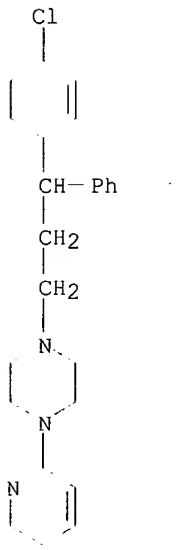
Double bond geometry as shown.



RN 24042-30-6 CAPLUS
CN Piperazine, 1-[3-(p-chlorophenyl)-3-phenylpropyl]-4-(2-pyridyl)-, maleate (1:1) (8CI) (CA INDEX NAME)

CM 1

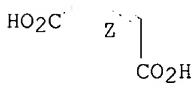
CRN 33656-18-7
CMF C24 H26 Cl N3



CM 2

CRN 110-16-7
CMF C4 H4 O4
CDES 2:Z

Double bond geometry as shown.

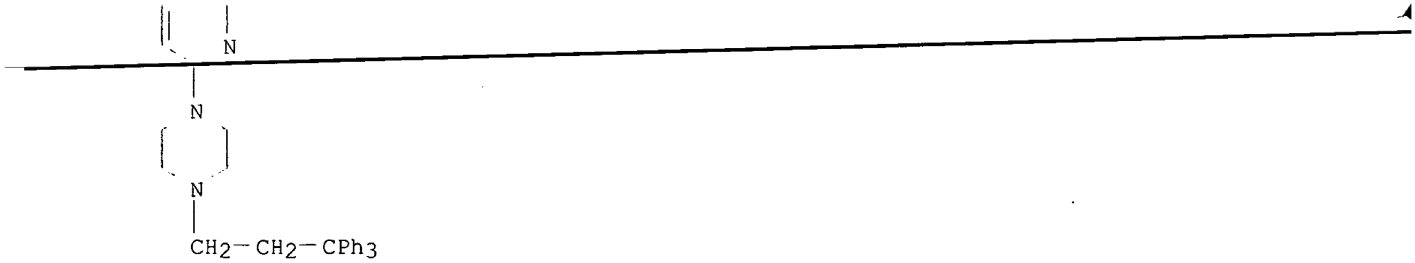


=> d bib abs hitstr 31

L13 ANSWER 31 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1969:87854 CAPLUS
DN 70:87854
TI Di- and triphenylpropyl piperazine derivatives
IN Regnier, Gilbert; Canevari, Roger; Le Douarec, Jean C.
PA Science Union et Cie.-Societe Francaise de Recherche Medicale
SO S. African, 17 pp.
CODEN: SFXXAB
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI ZA 6801455		19680812		
PRAI GB		19670314		

AB The title compds., useful as analgesics, antiinflammatory agents and as antitussives, are prepd. by alkylating the appropriate piperazine with a halo-substituted heterocyclic compd. Thus, a mixt. of 40 g. K2CO3, 15.8 g. 2-bromopyridine and 35.6 g. 1-(3,3, 3-triphenylpropyl)piperazine (m. 131.degree.) in 100 cc. HCONMe2 was heated 7 hrs. at 150.degree. and worked up to give 25 g.
1-(3,3,3-triphenylpropyl)-4-(2-pyridyl)piperazine, m. 148.degree.. Other compds. were cited but no details of prepn. or phys. properties were given. Some pharmacol. data are given.
IT **21801-31-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 21801-31-0 CAPLUS
CN Piperazine, 1-(2-pyridinyl)-4-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)



=> D
L13 32 BIB ABS HITSTR

L13 ANSWER 32 OF 32 CAPLUS COPYRIGHT 1999 ACS
AN 1969:11717 CAPLUS
DN 70:11717
TI 1-(3,3-Diphenylpropyl)-4-(2-pyrimidinyl)piperazines
IN Regnier, Gilbert; Canevari, Roger; Le Douarec, Jean C.; Laure, Michel
PA Science Union et Cie.-Societe Francaise de Recherche Medicale
SO Fr., 5 pp.
CODEN: FRXXAK
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 1505109		19671208		
PRAI GB		19651216		

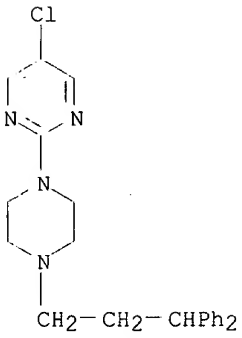
GI For diagram(s), see printed CA Issue.
AB Piperazines (I) are prepd. from II (R = 3-phenylpropyl) and 2-chloropyrimidines and from II (R = 2-pyrimidyl) and Ph2C(Ar)CH2CH2X compds. A mixt. of 15. g. II (R = Ph2CHCH2CH2) (III) 16.4 g. 2-chloropyrimidine, 250 ml. HCONMe2, and 27.6 g. K2CO3 is heated 7 hrs. at 150.degree. to give 25 g. 1-(3,3-diphenylpropyl)-4-(2-pyrimidyl)piperazine (IV), m. 111.degree.. Similarly prepd. are the following I (Ar, R, R1, R2, m.p., salt, and salt m.p. given): H, H, Cl, Cl, -, MeSO3H, 251.degree.; H, Me, H, H, 80.degree., -, -; H, Me, Me, H, -, fumarate, 195-205.degree. (decompn.); H, Me, H, Me, 103-5.degree., -, -; H, MeO, H, H, 88.degree., -, -; H, NH2, H, H, -, 2HCl, 164-5.degree.; H, NHMe, H, H, -, 2HCl, 175-8.degree.; H, NMe2, H, H, -, 2HCl, 178-81.degree.; H, H, (R1R2 =) benzo, -, 2HCl, 235-40.degree.; Ph, H, H, H, 130.degree., -, -; Ph, H, Cl, H, 124.degree., -, -; Ph, OH, H, H, -, 2HCl.H2O, 176-80.degree. (decompn.); Ph, Me, H, H, 128.degree., -, -; Ph, Me, Me, H, -, fumarate, 190-200.degree. (decompn.); Ph, Me, H, Me, 140.degree., -, -; Ph, MeO, H, H, 125.degree., -, -; Ph, NH2, H, H, - (2H2O) 132-40.degree. -, -; Ph, NHMe, H, H, 150-3.degree., -, -; Ph, NMe2, H, H, 115.degree., -, -; Ph, NHCH2CH:CH2, H, H, 154-8.degree. -, -; Ph, H, (R1R2 =) benzo, -, fumarate, 195-200.degree. (decompn.). The following compds. are also prepd. (m.p., salt, and salt m.p. given): 1-(3,3-diphenylpropyl)-4-(4-pyrimidyl)piperazine, -, fumarate monohydrate, 233-7.degree.; 1-(3,3-diphenylpropyl)-4-(4-benzopyrimidyl)piperazine, -, 2HCl, 230-5.degree.; 1-(3,3-diphenylpropyl)-4-(2-methyl-4-benzopyrimidyl)piperazine, - fumarate hemihydrate, 167-70.degree.; 1-(3,3,3-triphenylpropyl)-4-(4-pyrimidyl)piperazine, - (2H2O 64-6.degree.), -, -; 1-(3,3,3-triphenylpropyl)-4-(2-amino-4-pyrimidyl)piperazine, 188-90.degree., -; 1-(3,3,3-triphenylpropyl)-4-(4-benzopyrimidyl)piperazine, -, 2HCl, 155-60.degree.; 1-(3,3,3,-triphenylpropyl)-4-(2-methyl-4-benzopyrimidyl)piperazine, -, fumarate, 205-10.degree. (decompn.). 1-(2-Pyrimidyl)piperazine is treated with Ph2CHCH2CH2Br and p-MeC6H4SO3CH2CH2CPh3 to give IV and I (Ar = Ph, R = R1 = R2 = H), m. 130.degree., resp. III (2HCl salt m. 215-18.degree.) and II (R = Ph3CCH2CH2) (2 MeSO3H salt m. 184-7.degree.) are prepd. from piperazine.
IT **20974-39-4P 20974-40-7P 20974-41-8P**

20974-42-9P 20980-02-3P 20980-03-4P
20980-04-5P 20980-05-6P 20980-06-7P
20980-08-9P 20980-09-0P 20980-11-4P
20980-12-5P 20980-13-6P 20980-14-7P
20980-15-8P 20980-16-9P 20980-17-0P
20980-18-1P 20980-19-2P 20980-20-5P
21026-23-3P 21026-24-4P 21026-25-5P
21026-26-6P 21026-27-7P 21162-92-5P
21178-20-1P 22307-06-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 20974-39-4 CAPLUS
CN Pyrimidine, 5-chloro-2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, monomethanesulfonate (8CI) (CA INDEX NAME)

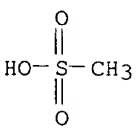
CM 1

CRN 47581-42-0
CMF C23 H25 Cl N4

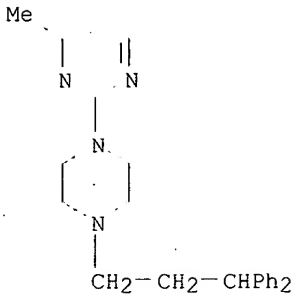


CM 2

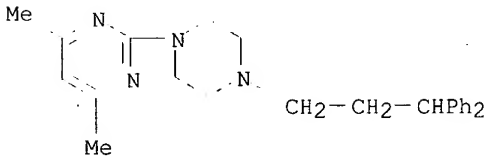
CRN 75-75-2
CMF C H4 O3 S



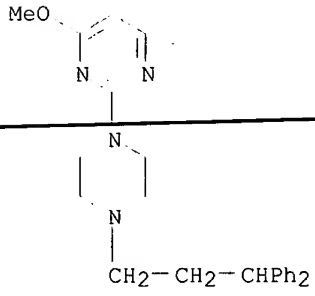
RN 20974-40-7 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4-methyl- (8CI) (CA INDEX NAME)



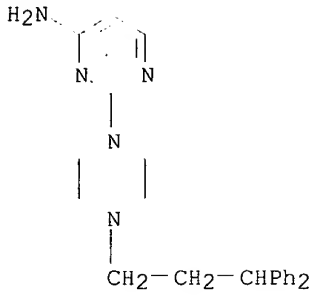
RN 20974-41-8 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4,6-dimethyl- (8CI) (CA INDEX NAME)



RN 20974-42-9 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4-methoxy- (8CI) (CA
INDEX NAME)

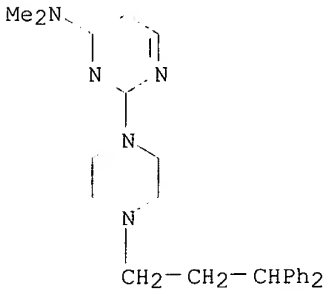


RN 20980-02-3 CAPLUS
CN Pyrimidine, 4-amino-2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, dihydrochloride (8CI) (CA INDEX NAME)



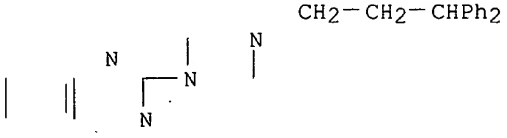
● 2 HCl

RN 20980-03-4 CAPLUS
CN Pyrimidine, 4-(dimethylamino)-2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, dihydrochloride (8CI) (CA INDEX NAME)



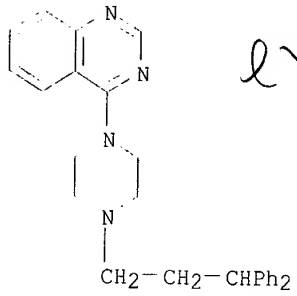
● 2 HCl

RN 20980-04-5 CAPLUS
CN Quinazoline, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, dihydrochloride (8CI) (CA INDEX NAME)



● 2 HCl

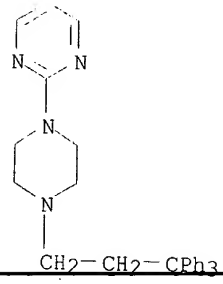
RN 20980-05-6 CAPLUS
CN Quinazoline, 4-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, dihydrochloride (8CI) (CA INDEX NAME)



excluded

• 2 HCl

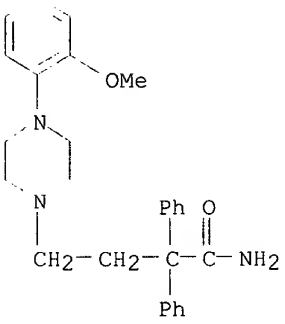
RN 20980-06-7 CAPLUS
CN Pyrimidine, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



RN 20980-08-9 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4-(methylamino)-, dihydrochloride (8CI) (CA INDEX NAME)

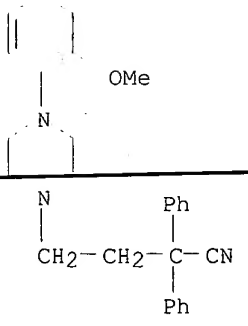
=> d an hitstr 4

L14 ANSWER 4 OF 4 COPYRIGHT 1999 ACS
AN CA57:13780e CAOLD
IT **96869-60-2 98588-49-9**
RN 96869-60-2 CAOLD
CN 1-Piperazinebutyramide, 4-(o-methoxyphenyl)-.alpha.,.alpha.-diphenyl- (7CI) (CA INDEX NAME)



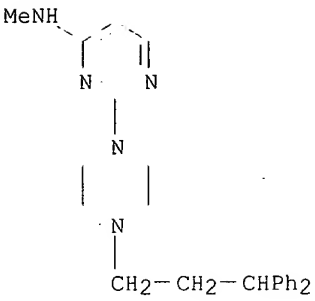
excluded

RN 98588-49-9 CAOLD
CN 1-Piperazinebutyronitrile, 4-(o-methoxyphenyl)-.alpha.,.alpha.-diphenyl-, dihydrochloride (7CI) (CA INDEX NAME)



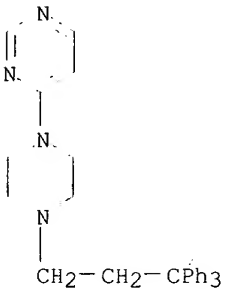
excluded

• 2 HCl

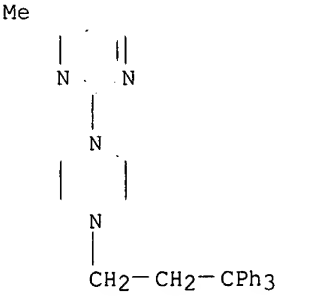


• 2 HCl

RN 20980-09-0 CAPLUS
CN Pyrimidine, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)

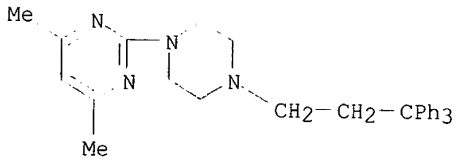


RN 20980-11-4 CAPLUS
CN Pyrimidine, 4-methyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)

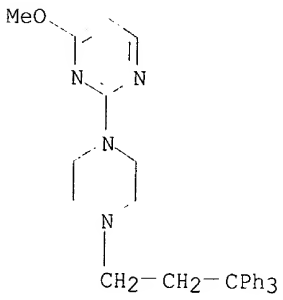


RN 20980-12-5 CAPLUS
CN Pyrimidine, 4,6-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-

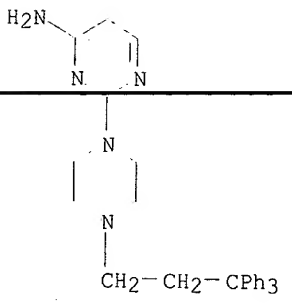
(8CI, 9CI) (CA INDEX NAME)



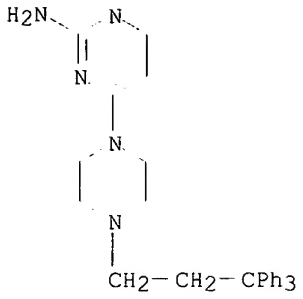
RN 20980-13-6 CAPLUS
CN Pyrimidine, 4-methoxy-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)



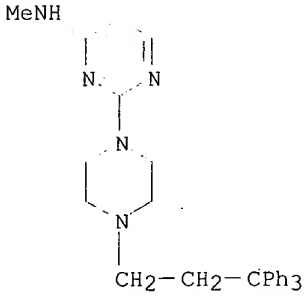
RN 20980-14-7 CAPLUS
CN 4-Pyrimidinamine, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



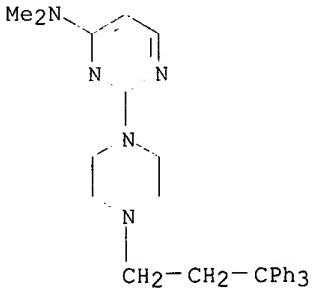
RN 20980-15-8 CAPLUS
CN 2-Pyrimidinamine, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



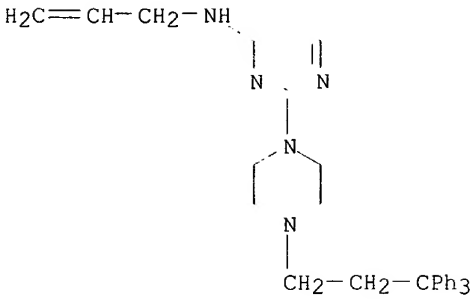
RN 20980-16-9 CAPLUS
CN 4-Pyrimidinamine, N-methyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-
(9CI) (CA INDEX NAME)



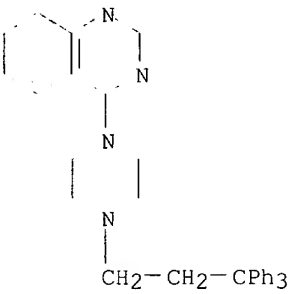
RN 20980-17-0 CAPLUS
CN 4-Pyrimidinamine,
N,N-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-
(9CI) (CA INDEX NAME)



RN 20980-18-1 CAPLUS
CN 4-Pyrimidinamine,
N-2-propenyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-
(9CI) (CA INDEX NAME)

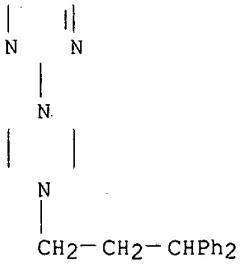


RN 20980-19-2 CAPLUS
CN Quinazoline, 4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride
(8CI, 9CI) (CA INDEX NAME)



● 2 HCl

RN 20980-20-5 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]- (8CI, 9CI) (CA INDEX NAME)

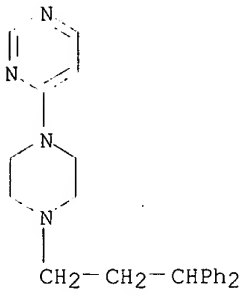


RN 21026-23-3 CAPLUS
CN Pyrimidine, 4-[4-(3,3-diphenylpropyl)-1-piperazinyl]-, fumarate (1:1)

(8CI) (CA INDEX NAME)

CM 1

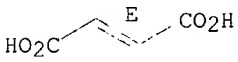
CRN 47544-49-0
CMF C23 H26 N4



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

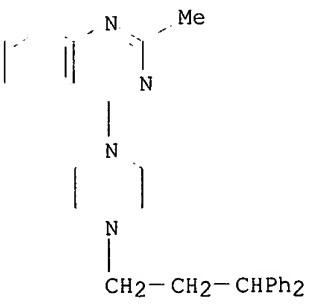
Double bond geometry as shown.



RN 21026-24-4 CAPLUS
CN Quinazoline, 4-[4-(3,3-diphenylpropyl)-1-piperazinyl]-2-methyl-, fumarate (1:1) (8CI) (CA INDEX NAME)

CM 1

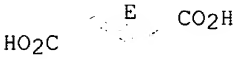
CRN 47704-65-4
CMF C28 H30 N4



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

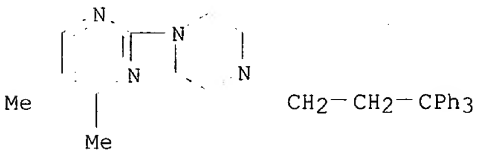
Double bond geometry as shown.



RN 21026-25-5 CAPLUS
CN Pyrimidine, 4,5-dimethyl-2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

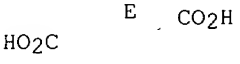
CRN 47758-61-2
CMF C31 H34 N4



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

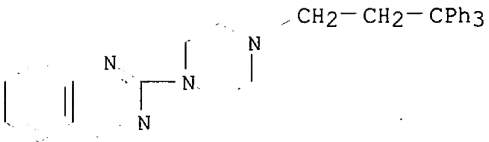
Double bond geometry as shown.



RN 21026-26-6 CAPLUS
CN Quinazoline, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

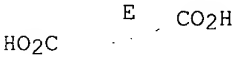
CRN 47787-36-0
CMF C33 H32 N4



CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

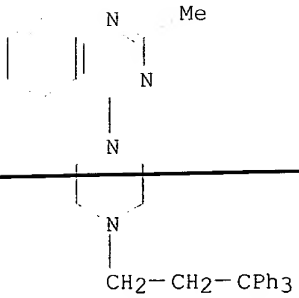
Double bond geometry as shown.



RN 21026-27-7 CAPLUS
CN Quinazoline, 2-methyl-4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

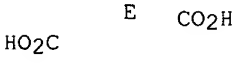
CRN 47796-32-7
CMF C34 H34 N4



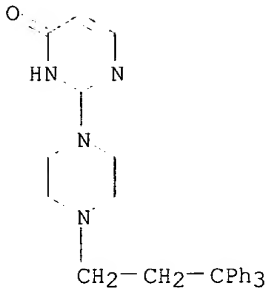
CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.



RN 21162-92-5 CAPLUS
CN 4(1H)-Pyrimidinone, 2-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

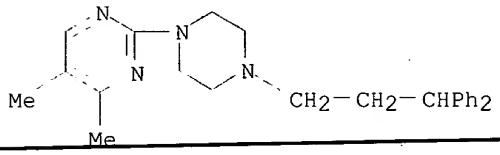


● 2 HCl

RN 21178-20-1 CAPLUS
CN Pyrimidine, 2-[4-(3,3-diphenylpropyl)-1-piperazinyl]-4,5-dimethyl-, fumarate (1:1) (8CI) (CA INDEX NAME)

CM 1

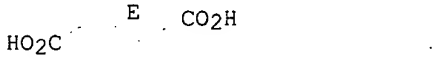
CRN 47625-97-8
CMF C25 H30 N4



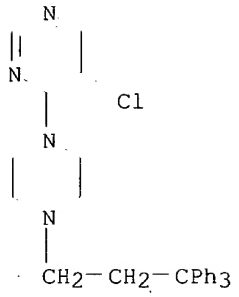
CM 2

CRN 110-17-8
CMF C4 H4 O4
CDES 2:E

Double bond geometry as shown.

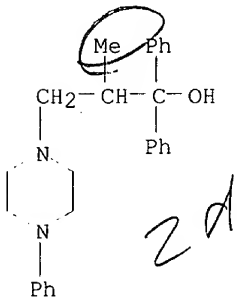


RN 22307-06-8 CAPLUS
CN Pyrimidine, 5-chloro-4-[4-(3,3,3-triphenylpropyl)-1-piperazinyl]- (8CI) (CA INDEX NAME)



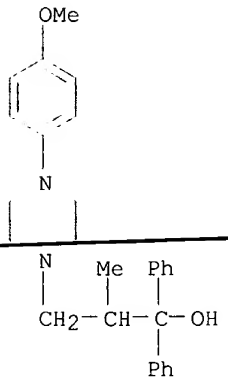
=> d an hitstr

L14 ANSWER 1 OF 4 COPYRIGHT 1999 ACS
AN CA63:18021b CAOLD
IT **4082-41-1 4082-42-2 4082-43-3**
RN 4082-41-1 CAOLD
CN 1-Piperazinepropanol, .beta.-methyl-.alpha.,.alpha.,4-triphenyl- (7CI, 8CI) (CA INDEX NAME)

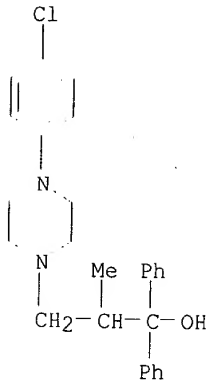


2 diffs ~~#~~ proviso requires at least one of Ph's must be subst'd

RN 4082-42-2 CAOLD
CN 1-Piperazinepropanol, 4-(p-methoxyphenyl)-.beta.-methyl-.alpha.,.alpha.-diphenyl- (7CI, 8CI) (CA INDEX NAME)

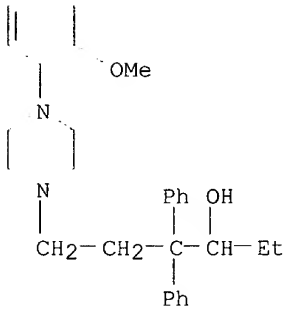


RN 4082-43-3 CAOLD
CN 1-Piperazinepropanol, 4-(p-chlorophenyl)-.beta.-methyl-.alpha.,.alpha.-diphenyl- (7CI, 8CI) (CA INDEX NAME)

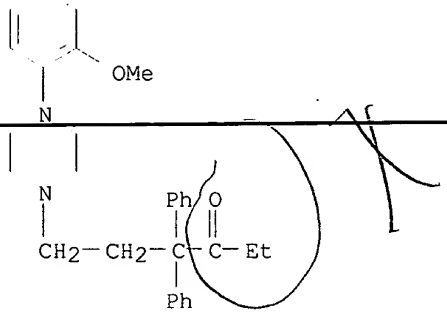

Cl
N
N
Me
Ph
CH2
CH
C
OH
Ph

=> d an hitstr 2

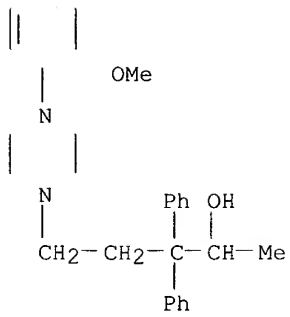
L14 ANSWER 2 OF 4 COPYRIGHT 1999 ACS
AN CA57:13780g CAOLD
IT **96269-21-5 96310-84-8 96931-47-4**
RN 96269-21-5 CAOLD
CN 1-Piperazinebutanol, .alpha.-ethyl-4-(o-methoxyphenyl)-.beta.,.beta.-diphenyl- (7CI) (CA INDEX NAME)



RN 96310-84-8 CAOLD
CN 3-Hexanone, 6-[4-(o-methoxyphenyl)-1-piperazinyl]-4,4-diphenyl- (7CI) (CA INDEX NAME)



RN 96931-47-4 CAOLD
CN 1-Piperazinebutanol, 4-(o-methoxyphenyl)-.alpha.-methyl-.beta.,.beta.-diphenyl- (7CI) (CA INDEX NAME)



=> d an hitstr 3

L14 ANSWER 3 OF 4 COPYRIGHT 1999 ACS
AN CA57:13780f CAOLD
IT **98878-82-1**
RN 98878-82-1 CAOLD
CN 2-Pentanone, 5-[4-(o-methoxyphenyl)-1-piperazinyl)-3,3-diphenyl- (7CI) (CA INDEX NAME)